Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 10/05): 42,781 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$34.6 - 39.7 per MWh, Ave. = \$37.8

Approximate change from previous week
 "Normal" price range, before 5/00
 \$+0.1 per MWh
 \$20-\$40 per MWh

Petroleum, West Texas Intermediate: \$49.91 per barrel (year ago: \$29.81)
Seattle gasoline price (10/04)
\$2.05 per gallon (year ago \$1.85),

• Natural gas, Sumas Hub: \$4.51 per million British Thermal Units (year ago \$4.11)

• Approximate change from last week. Oil: +0.01 \$ per barrel; Nat. gas: -.16 \$ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o July 22, 2004: Third consecutive day of record electricity use.
 - o A stage 1 alert, due to an unexpected heat wave, was declared on Mar. 31, 2004.
 - o 20 minute outage in So. Cal. on March 8, 2004 due to operator error.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001

4. Energy News Headlines from around the Nation

- o State OKs request for 17% gas rate boost (Seattle PI, Sept. 30)
- o Russian government backs UN accord on global warming (NYT, Sept. 30)
- California Gov. Schwarzenegger sets power system overhaul in motion (Inland Valley Daily, Sept.27)
- o A diesel reprieve (Seattle PI, Oct.4)
- o Slow learner on energy efficiency front (NYT, Oct 5)

5. River and Snow Pack Information (Updated: Sept. 8, 2004)

- Observed Aug stream flow at The Dalles: 86.1% of average,
- Observed Aug precipitation above The Dalles: 204% of average,
- Observed Jan.-July runoff at The Dalles: 83 MAF, 77% of normal,
- Federal hydropower generation in Aug.: 7,033 aMW, 1995-2002 average: 8,166 aMW.

6. Energy Conservation Achievement (Updated: Feb. 11, 2004)

• State Agencies: From Oct thru Dec 2003 electrical usage was 9% less and natural gas usage was 21.3% less compared to the same period in 2000.

7. Power Exchanged: (Updated: Oct. 5, 2004)

• Average flow of power during the last 30 days

o California (exported to) 2,784 MW o Canada (exported to) 1,410 MW o Net power export: 4,194 MW

State OKs PSE's request for 17% gas rate boost

SEATTLE POST-INTELLIGENCER, Sept. 30th

State regulators approved a rate increase of about 17 percent yesterday for Puget Sound Energy's natural-gas service.

The Utilities and Transportation Commission unanimously approved a rate increase that will take the average monthly natural-gas bill of \$70.12 to \$82.02. The increase will take effect tomorrow.

The commission said the increase won't boost the company's profits but will enable the utility to keep pace with higher wholesale gas costs.

Puget Sound Energy, based in Bellevue, serves 650,000 customers in King, Kittitas, Lewis, Pierce, Thurston and Snohomish counties.

Russian Government Backs U.N. Accord on Global Warming

By REUTERS September 30, 2004

The Russian government approved the Kyoto Protocol Thursday, giving decisive support to the long-delayed climate change treaty that should allow it to come into force worldwide.

The controversial pact will now be passed to the Kremlin-dominated parliament for ratification.

President Vladimir Putin's government acted despite worries by many officials who say the 1997 U.N. pact, which orders cuts in greenhouse gas emissions to slow global warming, would harm the economy and not protect the environment.

The European Union hailed Moscow's decision and seized the moment to urge Washington, whose rejection of the pact in 2001 left it dependent on Russia's approval, to rethink its position.

"The fate of the Kyoto protocol depends on Russia. If we... rejected ratification, we would become the ones to blame (for its failure)," Deputy Foreign Minister Yuri Fedotov told the cabinet meeting.

Russia, which accounts for 17 percent of world emissions, has held the key to Kyoto's success or failure since the United States pulled out.

The pact becomes binding once it has been ratified by 55 percent of the signatories which must, among them, account for 55 percent of developed countries' carbon dioxide emissions.

Kyoto has surpassed the first requirement as 122 nations have ratified it. But without Russia they account for only 44 percent of total emissions.

Russia, a signatory of the pact, initially prevaricated on ratification. But in May Putin backed it in exchange for EU agreement on the terms of Moscow's admission to the World Trade Organization.

"We warmly welcome the decision," a European Commission spokesman said in Brussels. He added that the EU now encouraged Washington to review its attitude to the pact. Environmentalists and experts were equally positive.

"Now he (Putin) can go down in history as the savior (of Kyoto)," said Benito Mueller, an expert on the issue for British-based think-tank the Royal Institute for International Affairs.

BATTLES STILL AHEAD

However, Thursday's meeting left unanswered the question of when parliament could practically debate ratification. Prime Minister Mikhail Fradkov, who was absent from the cabinet meeting, predicted a tough battle in the State Duma, the lower house.

"The discussion on the subject is open and debate is likely to be difficult," Fradkov was quoted by Interfax news agency as saying on a visit to the Netherlands.

Proponents of Kyoto say that apart from contributing to environmental security worldwide, Russia would be encouraged to upgrade its industries to match new standards and could earn billions of dollars selling excess quotas for gas emissions.

But opponents said Russia was likely to be the loser.

"The Academy of Science confirms its position that the protocol is not effective and gives us no advantages," the head of the academy's institute on climate change and ecology, Yuri Izrael, told the cabinet meeting.

Putin's economic adviser Andrei Illarionov warned that new environmental standards would cost industry more and undermine the Kremlin's plan to double gross domestic product in 10 years.

"Many economic calculations show that if the protocol is ratified, the doubling of GDP becomes impossible in the next 10 years," Illarionov said. "This will require changes in the social and economic policies."

But the influential head of Duma's international affairs committee, Konstantin Kosachev, said that, despite differences, parliament had the means to ratify Kyoto smoothly now that the government had expressed its will.

"There seems to be a consensus over the political importance of Kyoto, while economic and ecological consequences are the issues causing trouble," he told reporters.

"If the government decided the pact should be ratified, it must have thought that the latter two are not that important."

There is no official time limit for the cabinet to send a ratification request to the Duma. Kosachev said that if it was quick in coming, his committee could consider it by the end of the year to prepare for a full-session debate.

Interfax said ministries linked to the environment had been given three months to work out practical measures arising from Russia's obligations.

Government officials have said that Russia needs changes in environmental legislation, new regulations on measuring emissions and rules for trading quotas.

California Gov. Schwarzenegger Sets Power-System Overhaul in Motion

Sept. 27 - Inland Valley Daily Bulletin

While focusing the public's attention on his efforts to rebuild the California economy, Gov. Arnold Schwarzenegger has quietly started overhauling the state's dysfunctional power system with the goal of completing the task in time for a 2006 re-election bid.

But critics say another electricity crisis -- like the one in 2001 that soured voters on former Gov. Gray Davis, led to his low job-approval ratings and paved the way for his recall -- is imminent, and that Schwarzenegger is not doing enough to prevent it.

Administration officials, however, say the Republican governor has a strategy to head off short-term power supply and transmission problems, and to create long-term stability to benefit business and consumer ratepayers.

"The governor's plan is simple: more reliable power and better prices for all ratepayers," Schwarzenegger spokeswoman Ashley Snee said.

His plan is particularly needed to protect Southern California, except for Los Angeles which has its own power utility, and the San Francisco Bay area, administration officials say.

Unlike his solutions for the state budget crisis and high workers' compensation insurance rates, the governor's electricity fix does not require much negotiation or compromise with the Democrat-controlled Legislature.

Using his authority to appoint members to state regulatory boards such as the Public Utilities Commission, Schwarzenegger can call most of the shots.

His intricate plan involves the complex tasks of writing new regulations, accelerating the implementation of previously passed legislation and expanding the state's power-industry infrastructure to meet two key goals -- ensuring that supply meets demand, and making sure electricity can be delivered where it is needed at any time.

But the governor's plan won't solve the state's problems, said Assembly Speaker Fabian Nunez, D-Los Angeles.

Nunez said Schwarzenegger would leave too many decisions to the PUC -- a move that contributed to the last crisis, he said -- and would not encourage the building of new generating plants, or provide the ratepayer protections the state needs.

Nunez was an author of Assembly Bill 2006, the Democratic counter-proposal to the governor's plan.

As was widely expected, Schwarzenegger on Saturday vetoed AB 2006, which was co-authored by Sen. Debra Bowen, D-Redondo Beach, chair of the Senate Energy, Utilities and Communications Committee.

"His energy policy does absolutely nothing," Nunez said. "I'm not saying mine is perfect, but I think it's the closest thing to getting us out of this crisis."

A number of consumer-watchdog groups and other Democrats are suspicious -- if not highly critical -- of Schwarzenegger's proposals. They contend the governor is too cozy with the power industry and that his plan would cost ratepayers, possibly leading to another electricity crisis like the one that occurred a few years ago.

The Foundation for Taxpayer and Consumer Rights, a Santa Monica organization that regularly criticizes Schwarzenegger and operates Arnoldwatch.com, accuses him of proposing the same electricity deregulation "agenda" that led to the 2001 energy crisis and ended up costing Davis his job.

The group says the governor's plan to streamline and consolidate some of the state's energy regulatory boards would eliminate protections for ratepayers and make another "phony" shortage possible.

"Californians were devastated by energy deregulation," FTCR spokesman Doug Heller said.

He said Schwarzenegger's plan to build more power plants risks weakening environmental standards.

Heller said AB 2006 was designed to "restore regulatory balance to our state," but Schwarzenegger seems to be operating on the assumption that "deregulation can work."

Administration officials vehemently dispute such criticism, pointing out that this past summer included seven days of record-breaking electricity demand but ended with no power blackouts because of policies the governor has already set in motion.

Among the the major components of his plan:

- -- Having the PUC and other state regulatory boards speed up the implementation of state regulations to entice and to make it easier for investor-owned utilities and independent power companies to build new power plants and power transmission lines.
- -- Requiring energy suppliers to keep 15 percent worth of reserves available to meet unusual and unanticipated spikes in demand. The administration expects to see this goal met in 2006.
- -- Creating a dual market, with consumers being able to depend on the stability of buying power from the utilities they are used to, and large businesses and cities having the option of purchasing electricity from the supplier of their choice.
- -- Increasing natural gas supplies, as 45 percent of California power plants are powered by natural gas. When natural gas is scarce, the cost to generate power increases, as does the cost of electricity.
- -- Encouraging conservation and the use of alternative fuels such as wind and solar power, so that by 2020 roughly a third of all power consumed by California comes from environmentally friendly sources.
- -- Reducing costs immediately by renegotiating the long-term contracts for electricity signed by the Davis administration at the height of the 2001 energy crisis, and accelerating and increasing the amount of refunds from energy suppliers to California ratepayers that have already been ordered by the Federal Energy Regulatory Commission.

"I think this plan recognizes the complexity of the energy market in California," said Dominic DiMare, a spokesman for the California Chamber of Commerce. "It allows for both public utilities and independent producers to participate in the marketplace -- and I don't think a market that excludes some participants is right for California."

A diesel reprieve

Seattle PI, Oct. 4

Diesel emissions constitute some of the biggest air pollution threats to health. The problem is finally receiving much-needed attention around Puget Sound and along the West Coast.

Last week, officials announced that a cruise ship line will turn off diesel engines on two of its ships while in port and plug into dockside electric outlets. That means fewer particulates and cancercausing toxins in the air.

The federal Environmental Protection Agency is giving \$50,000 to Seattle City Light for necessary equipment purchases. The EPA, a host of private groups and states, including Washington, are engaged in a West Coast diesel initiative to cut pollution. And the Bush administration has enacted strong new national rules on diesel.

The coast initiative is vital. Western port cities face serious challenges in reducing diesel emissions from concentrated ship, railroad and trucking sources. Through wide-ranging cooperation, jobs can expand at the same time that health improves.

Slow Learner on Energy-Efficiency Front

By JAD MOUAWAD NYT October 5, 2004

The United States, land of gas-guzzling S.U.V.'s and air-conditioned McMansions, might do well to turn to the country some Americans love to hate for lessons on how to curb its reliance on imported oil: France.

Now that oil has reached roughly \$50 a barrel and the world is coming to expect relatively high oil prices to last a long time, experts say that a rethinking of America's wasteful ways is once again an urgent undertaking.

And like it or not, France - whose perceived diplomatic obstructionism in the run-up to the Iraq war provoked a boycott of French products by some Americans - has displayed a quality ripe for export: an impressive tenacity in waging what the French call the war on gaspi, short for gaspillage, or waste. It has also done so in a way that the United States has not been able to: over the long term.

Spurred by the oil shocks of the 1970's, France embarked on a vast state-led drive to flush out as much oil from its economy as possible. With the national slogan at the time, "We don't have oil, but we have ideas," it accelerated the shift of electricity production from oil-fired power plants to nuclear reactors, increased taxes on gasoline to the equivalent of \$3.75 a gallon, encouraged the sale of diesel-powered cars and gave tax breaks to energy-hungry industries like aluminum, cement and paper to shift from oil to other fuels.

It worked. In contrast to the United States, where oil consumption initially fell but then ended up rising by a total of 16 percent from 1973 to 2003, in France, despite some increase in recent years, oil use is still 10 percent lower today than it was three decades ago, according to the United States Energy Information Administration. (Germany also matched France's record.)

"Americans have completely abandoned their efforts at energy conservation over the past decade and have been incredibly care-free about oil consumption because they believed they would get access to cheap energy - through force if necessary," said Pierre Terzian, an energy specialist who runs the Paris-based consulting firm PetroStrategies.

The contrast between French resolve and American abandon in recent years is sharp. The United States, too, took the high road in the 1970's and early 80's, when the combined impact of the 1973 oil embargo, the growing power of OPEC and the Iranian revolution of 1979 created long gas lines and raised the prospect of an oil producers' stranglehold over the American economy.

The price of Arabian light crude rose from \$1.85 a barrel in 1972 to \$40 in 1981, or \$80 in today's dollars.

Americans responded with a nationwide speed limit of 55 miles an hour, a home-insulating boom and a blossoming of energy-technology start-ups to help businesses cut their energy bills. Vast improvements came in home appliances: refrigerators, for example, now consume a third of the energy needed 30 years ago.

But slowly, the nation resumed old habits. By the late 1980's, with the economy booming and oil prices below \$20 a barrel, gas guzzlers were back, cars raced along highways at 75 m.p.h. with impunity and new vehicles' average mileage per gallon, which had almost doubled to 27.5 in 1987 from 14 in 1972, slipped back to 24, compared with Europe's 36.

Wednesday October 6, 2004

In the 1990's, the United States, which represents roughly 24 percent of world economic output and an even lower share of industrial production, nonetheless accounted for a third of the growth in demand for global oil.

A big reason for the policy divide, said Amy Jaffe, the associate director of Rice University's energy program, is a cultural contrast of two sharply opposed ways of looking at the world.

"In the United States, we try to control things over which we have no control, like Russia or Saudi Arabia, instead of looking at what we could do inside," Mrs. Jaffe said. "We're like drug addicts. We're looking around for another dealer instead of going to detox."

For now, the presidential candidates are preaching familiar themes in their campaigning, with President Bush calling for more exploration and increased domestic production and Senator John Kerry promoting alternative energies.

But with oil now at \$50 a barrel, double what it was two years ago, and with many analysts expecting substantially higher energy prices in the next decade than during the 1990's, some experts are saying that both government and industry are going to need to do some fundamental rethinking of some basic policies.

"The lack of emphasis on demand in the past 20 years in the United States has a lot to do with the predicament we're in now," said Ashok Gupta, an economist with the National Resources Defense Council. "We need to look at what it will take to get manufacturers to offer technologies that people want."

One obvious step, which politicians are loath to even mention, would be to increase taxes on gasoline. Here again, the divergence between the United States and Europe is instructive. To encourage the use of mass-transit systems, and finance their development, European governments impose generally high taxes on gasoline. French drivers pay over \$5 a gallon for gasoline, \$3.75 of that in taxes, compared with \$1.90 a gallon on average in the United States, with only 41 cents of that going to taxes.

Proposing a tenfold increase in taxes to match the European level would, of course, be political suicide in the United States. There have been several attempts to increase federal taxes on gasoline over the years, but "they've all met with disaster," said Kateri Callahan, the president of the Alliance to Save Energy, a business-supported group that promotes energy efficiency.

"Mobility is seen as a national right here in the United States," Mrs. Callahan said. "To impose a higher tax when gasoline prices are already perceived to be high is simply not good politics."

At the same time, environmentalists face pressure to accept some trade-offs.

Most European countries, for example, have encouraged drivers to buy cars with diesel engines, which burn 30 percent less fuel than regular engines. Two-thirds of cars registered in France are diesel-fueled, according to the European Automobile Manufacturers' Association. That compares with diesel sales of less than half of 1 percent in the United States.

One hurdle to diesel sales in the United States is that compared with conventional gasoline-powered cars, diesels emit more smog-forming pollutants, though they offer lower emissions of the kind that contribute to global warming. Still, with better technology, some carmakers like Chrysler plan to offer new diesel models later this year.

While diesels have made little headway, fuel-efficient hybrid cars - with electric motors that take over for the gas engines at low speeds and stops - are gaining in popularity. But so far, only a few

Wednesday October 6, 2004

carmakers offer them, and there is a waiting list for some of the more popular models, like the Toyota Prius.

An additional disparity between the United States and France is the approach to nuclear energy. With domestic production of oil a tiny 3 percent of the two million barrels it consumes each day, France has turned to nuclear power as its economic savior; 80 percent of its electricity now comes from the country's 19 nuclear plants, compared with 40 percent in Sweden, 30 percent in Japan and Germany and 20 percent in the United States.

"Because it didn't draw a lucky geological hand, France has always looked for energy independence," said Dominique Maillard, the country's top official in charge of energy policy as the director of energy at the Ministry of Industry. "We used nuclear power as a path to offset our dependency on imports."

The United States, in contrast, has turned up its nose at nuclear energy, in part because of the risk of a meltdown (much reduced in recent years, experts say), and in part because of the controversy over the disposal of nuclear waste. The biggest factor, though, was the soaring cost of building nuclear plants to satisfy more rigorous standards.

Since the accident at the Three Mile Island nuclear reactor in Pennsylvania in March 1979, no new reactors have been built. With oil prices rising and concern about global warming spreading, nuclear power advocates argue that a new generation of power plants can overcome the problems with nuclear energy at an acceptable cost.

To be sure, the depiction of the United States as the world's energy wastrel and of France as a model of virtue can be overdrawn. All developed countries have significantly improved their energy efficiencies in manufacturing and construction since 1973. Moreover, oil's slice of global energy demand has fallen to 35 percent today from 45 percent 30 years ago.

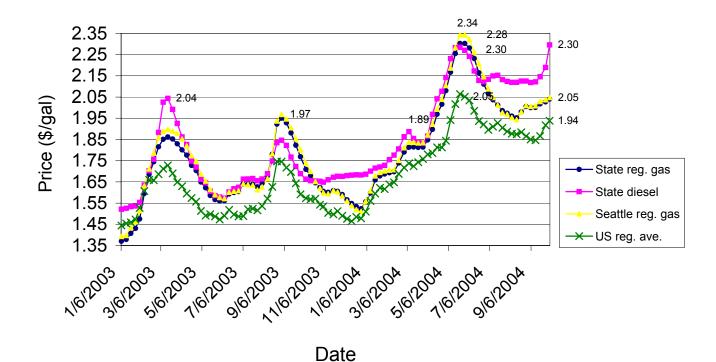
Still, oil will remain the main source of energy for decades to come, and official projections still show oil consumption in the United States rising by 43 percent by 2025.

But rising prices could go a long way to damp demand.

"The question is, How much do prices have to increase for attitudes to change?" Mr. Gupta of the National Resources Defense Council said.

The petroleum futures price for November delivery closed at over \$50 per barrel on Friday, and is trading above 51 dollars today, both records for the NYMEX. Factors in the recent record prices included continued high global demand, violence in Iraq and Nigeria, the lingering effects of hurricane Ivan, and speculation by numerous hedge funds in the commodities market. Higher petroleum prices have put renewed upward pressure on gasoline and diesel prices during a time of year when they tend to decrease somewhat due to lower demand. Diesel prices have been particularly impacted by hurricane Ivan which not only shut down 0.5 million barrels per day of crude oil production in the Gulf of Mexico, but also closed a number of refineries that had shifted production to heating oil (essentially diesel oil) production for the winter.

WA State Gasoline and Diesel Prices: Jan. 03 - Oct. 04



Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 10/12): 40,787 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$37.1 – 41.9 per MWh, Ave. = \$39.7

Approximate change from previous week
"Normal" price range, before 5/00
\$\frac{\$+1.9\$ per MWh
\$20-\$40 per MWh

Petroleum, West Texas Intermediate: \$52.51 per barrel (year ago: \$29.81)
Seattle gasoline price (10/04)
\$2.08 per gallon (year ago \$1.85),

• Natural gas, Sumas Hub: \$4.42 per million British Thermal Units (year ago \$4.11)

• Approximate change from last week. Oil: +2.60 \$ per barrel; Nat. gas: -.09 \$ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o July 22, 2004: Third consecutive day of record electricity use.
 - o A stage 1 alert, due to an unexpected heat wave, was declared on Mar. 31, 2004.
 - o 20 minute outage in So. Cal. on March 8, 2004 due to operator error.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001

4. Energy News Headlines from around the Nation

- o Several factors blamed for soaring (CA) gas prices (LA Times, Oct. 13)
- o Sec. Snow expects Arabs to help with oil prices (Seattle PI, Oct. 10)
- o Some Gulf oil outages may last until next year (WSJ, Oct 12)

0

5. River and Snow Pack Information (Updated: Sept. 8, 2004)

- Observed Aug stream flow at The Dalles: 86.1% of average,
- Observed Aug precipitation above The Dalles: 204% of average,
- Observed Jan.-July runoff at The Dalles: 83 MAF, 77% of normal,
- Federal hydropower generation in Aug.: 7,033 aMW, 1995-2002 average: 8,166 aMW.

6. Energy Conservation Achievement (Updated: Feb. 11, 2004)

• State Agencies: From Oct thru Dec 2003 electrical usage was 9% less and natural gas usage was 21.3% less compared to the same period in 2000.

7. Power Exchanged: (Updated: Oct. 12, 2004)

• Average flow of power during the last 30 days

o California (exported to) 2,387 MW o Canada (exported to) 1,539 MW o Net power export: 3,926 MW

Several Factors Blamed for Soaring Gas Prices

By Elizabeth Douglass, LA Times, Oct. 13

As California gasoline prices matched record highs Tuesday, oil industry experts warned that the state's fuel market was short on competition and supplies and possibly vulnerable to manipulation.

The assessment came amid an unusual off-season surge in the cost of gasoline. The average gallon of self-serve regular climbed 12.9 cents over the last week to \$2.327 — tying the California record set at the end of May. The average has moved up more than 23 cents in two weeks, according to the Energy Information Administration.

"I don't see any real end in sight for the next 30 days," said Will Woods, executive director of Automotive Trade Organizations of California, a Tustin-based trade group for independent service station owners.

The primary culprit, experts said, was the incredible rise in the cost of a barrel of crude oil, which typically accounts for about half of the cost of a gallon of gasoline.

Bolstered by ongoing concerns about worldwide supplies, the price for November delivery of light sweet crude briefly rose above \$54 a barrel Tuesday, ending at \$52.51, down \$1.13 from Monday's record close of \$53.64 on the New York Mercantile Exchange.

Traders are worried about possible disruptions in oil-rich regions such as Iraq, Nigeria and Russia. They also have taken note of ongoing problems in the Gulf of Mexico, where producers have yet to recover from the ravaging winds and 60-foot waves of Hurricane Ivan.

San Ramon, Calif.-based **ChevronTexaco** Corp. said Tuesday that the hurricane flipped and crushed a platform that was specially built to withstand a 500-year storm, defined as having 50-foot waves.

Oil prices alone don't account for all of the sticker shock in California, where gasoline prices have soared more steeply than in the rest of the nation.

The average gallon of self-serve regular gasoline in the state now costs 33 cents more than the national average of \$1.993, according to government figures released Tuesday and based on a survey taken Monday.

The U.S. average increased 5.5 cents in the last week but is still below the peak of \$2.064 a gallon reached May 24. (Adjusted for inflation, gasoline was more expensive in 1981 when the U.S. and California averages hit about \$3 a gallon.)

On Tuesday, some experts cited another factor for California's expensive fuel: the power of oil companies to legally increase prices because the state's unique cleaner-burning gasoline is produced by few refineries outside the state.

"As much as supply and demand is basic economics, so is market power," said Severin Borenstein, director of the University of California Energy Institute, speaking at a workshop sponsored by the

California Energy Commission.

"And it is without question that the production of some of these companies — pretty much all of the major producers of California gasoline — affect price in this market," Borenstein, said.

The proof, he added, is that when even one refinery goes down unexpectedly, gasoline prices in California jump. He said the situation created an incentive to hold back production to boost prices.

"These guys are out to make money. And that's OK," Borenstein said. "But pretending that's not what they're doing is not productive toward getting at treating the real issues."

Drew Laughlin, a Houston-based industry consultant, agreed: "The conditions exist so that certain behaviors can take place and be harmful to the general good — not by any deliberate scheming — but by incentives and good trading" of oil and gasoline.

That notion was met with vehement disagreement from Philip Verleger Jr., a senior fellow at the Institute for International Economics.

Verleger, whose opinion was backed by the oil industry's Western States Petroleum Assn., argued that no companies in California hold sufficient market share to force movements in the price of gasoline.

Instead, California consumers are the victims of traditional market forces, he said, including the worldwide tightening of crude oil stockpiles and the difficulty of attracting imports to the state.

Snow expects Arab help against oil prices

By WILLIAM C. MANN, Seattle PI, Oct. 10

Oil costing roughly \$53 a barrel is a major drag on the U.S. economy, and Arab finance ministers have told the Bush administration they are committed to bringing the price down, Treasury Secretary John Snow said Sunday.

Snow said the need is urgent because sky-high gasoline prices in effect impose an undeclared tax on Americans so dependent on petroleum products.

"I just left a series of meetings with Middle Eastern finance ministers, where we put on the table the need for expansion of output in quotas," Snow said.

"I must say that we got a very good response on that, and they've indicated that they are committed to bringing the price of oil down," the Treasury chief told CNN's "Late Edition."

Snow hosted a meeting of those ministers earlier this month in Washington.

Because of the current record high prices, oil "is creating headwinds for the otherwise very strong economy," Snow said. "It acts like a tax, taking disposable income away from people."

The United States imported almost 9.7 million barrels of oil per day in 2003, a 6.6 percent increase over the almost 9.1 million barrels daily in 2000. At that time, the price of oil was in the middle to high \$30s per barrel.

Snow was asked his view about whether, considering the overall situation, the price of oil should go down soon. The Organization of Petroleum Exporting Countries has raised its daily production quotas by 2.5 million barrels a day this year.

"I think the price is above what's justified by the fundamentals of the marketplace," Snow said. "It's out of line with the fundamentals, and there will be a movement back toward the fundamentals, which means a lower price. Yes," Snow said.

Snow said part of the solution to the current problem would mean lessening the United States' reliance on imports by enacting the administration's proposed energy policy.

"The president sent to the Congress three years ago legislation to make us less dependent on these uncertain foreign supplies," Snow said. "It passed the House twice; it's time for the Senate to act."

The proposal is given little chance of passage. Democrats and moderate Republicans reject the bill because it would do nothing to promote fuel economy.

Also, an administration proposal to recover oil from Alaska's Arctic National Wildlife Refuge has met strong opposition. The refuge represents the biggest untapped U.S. oil resource, but the Energy Department has acknowledged that production there would slow the growth of imports only modestly.

Some Gulf Oil Outages May Last Until Next Year

Andrew Dowell and Spencer Jakab., WSJ Oct. 12

Damage to pipelines is keeping a substantial amount of oil and natural-gas production offline in the Gulf of Mexico, and much of it may not return until next year, the U.S. Department of Interior's Minerals Management Service said.

While nearly a third of the oil production still shut down may be back online by the end of October, the rest could take six months to bring back, the MMS said. The production is otherwise ready to be restored, the agency said. As of Friday, about 28% of crude oil and about 14% of natural gas from the Gulf remained down.

The outages are tightening an already stressed market. Yesterday, those concerns -- along with unease over a general strike in Nigeria -- contributed to a 33-cent rise in November benchmark crude futures, to \$53.64 a barrel, another new high in the 21-year history of the contract. Year-to-date, crude oil has risen 65%.

The damage was concentrated more on pipelines than platforms. About 30% of the Gulf's 33,000 miles of pipelines were in the direct path of Hurricane Ivan, compared with just 4% of its 4,000 structures, the MMS said. Segments of four large oil pipelines and five large gas pipelines remain shut in. "Pipelines in the mud slide areas off the mouth of the Mississippi River experienced failures and will take a significant effort to locate and repair because the pipelines are buried by as much as 20 to 30 feet of mud," the MMS said.

As of Friday morning 475,000 barrels of oil a day and 1.8 billion cubic feet a day of gas were offline. Cumulative losses in the 3 1/2 weeks since Hurricane Ivan began affecting production have been 17 million barrels of oil and 74 billion cubic feet of gas.

Chris Oynes, regional director for the MMS, said preliminary data from the government's National Oceanic and Atmospheric Administration show that central Gulf of Mexico was hit by mammoth waves -- including perhaps the tallest ever recorded in the Gulf -- that exceeded the design requirements of the area's infrastructure. "There were some extremely large waves," he said.

Wednesday October 13, 2004

"There is some evidence that there was one rogue wave, the largest ever seen in the Gulf of Mexico, some 90 feet high."

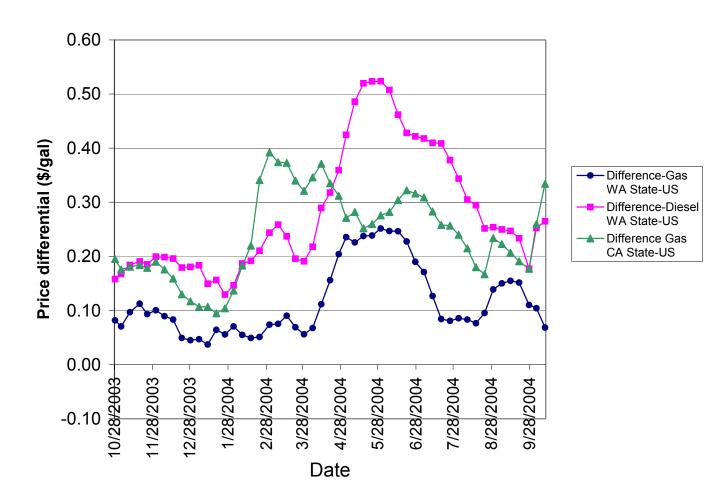
Companies will try to bring up pressure on pipelines gradually in order to minimize environmental damage if leaks are discovered, Mr. Oynes said. "Are they likely to find other problems at some time? Yes," he said.

The storm's eastern track, while it spared the heart of the producing area, may have been worse for pipelines. Damage from the storm surge, both incoming and receding, was made more severe by the tons of mud on the sea floor near the mouth of the Mississippi River, Mr. Oynes said.

Two tropical storms in the Gulf since Hurricane Ivan moved through have also hampered damage-assessment efforts by companies operating platforms there.

The petroleum futures price for November delivery closed at over \$53 per barrel on Monday. Gasoline and diesel prices increased 2 and 5 cents/gallon respectively from last week. Gasoline prices in California increased a whopping 13 cents from last week (to a record \$2.32/gallon), and 27 cents/gallon over the last three weeks signaling possible supply and refinery problems within the state. Since California is by far the largest gasoline/diesel consumer and producer on the west coast this may put upward pressure on fuel prices in Washington State within the next couple of weeks.

Fuel Price Differentials WA & CA States vs. US Average



Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 10/19): 44,613 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$38.1 - 43.0 per MWh, Ave. = \$40.0

Approximate change from previous week
"Normal" price range, before 5/00
\$\pmu = 0.3 \text{ per MWh}\$
\$\pmu = 0.3 \text{ per MWh}\$

Petroleum, West Texas Intermediate: \$53.67 per barrel (year ago: \$30.55)
Seattle gasoline price (10/18)
\$2.09 per gallon (year ago \$1.65),

Natural gas, Sumas Hub:
 Approximate change from last week.
 \$4.58 per million British Thermal Units (year ago \$4.40)
 Oil: +1.16 \$ per barrel; Nat. gas: +0.16 \$ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o July 22, 2004: Third consecutive day of record electricity use.
 - o A stage 1 alert, due to an unexpected heat wave, was declared on Mar. 31, 2004.
 - o 20 minute outage in So. Cal. on March 8, 2004 due to operator error.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001

4. Energy News Headlines from around the Nation

- o Greenspan not worried by rising energy prices (NYT, Oct. 15)
- o Higher fuel costs starting to hit consumers (NYT, Oct. 12)
- o Avista seeks review of denied increase in Idaho gas, electric rates (Spokesman Review, Oct 15)
- o Congress clears way for construction of natural gas pipeline (Natural Gas Intelligence, Oct 13)

5. River and Snow Pack Information (Updated: Oct. 20, 2004)

- Observed Sept. stream flow at The Dalles: 122.8% of average,
- Observed Aug precipitation above The Dalles: 148% of average,
- Observed Jan.-July runoff at The Dalles: 83 MAF, 77% of normal,
- Federal hydropower generation in Aug.: 7,033 aMW, 1995-2002 average: 8,166 aMW.

6. Energy Conservation Achievement (Updated: Feb. 11, 2004)

• State Agencies: From Oct thru Dec 2003 electrical usage was 9% less and natural gas usage was 21.3% less compared to the same period in 2000.

7. Power Exchanged: (Updated: Oct. 20, 2004)

• Average flow of power during the last 30 days

o California (exported to) 2,784 MW o Canada (exported to) 1,410 MW o Net power export: 4,194 MW

Greenspan Not Worried by Rising Energy Prices

NYT, October 15, 2004

This year's surge in energy prices is likely to have far less of an impact on the economy than the oil shocks of the 1970s, Federal Reserve Chairman Alan Greenspan said Friday.

Greenspan predicted that the global economy will adjust to the recent surge in prices, which has seen oil topping \$50 per barrel, by boosting energy exploration and production and by increasing fuel efficiency. But he conceded that the transition period could feature unexpected bumps.

"We and the rest of the world doubtless will have to live with the uncertainties of the oil markets for some time to come," Greenspan said in remarks to the National Italian American Foundation in Washington.

Oil prices closed at a record of \$54.76 per barrel on Thursday as fears about supplies in the United States and the possibility of attacks on oil pipelines in the Middle East have sent the price of crude to record levels in dollar terms.

Greenspan, however, noted that even with the recent jump, energy prices are still only three-fifths as high, after adjusting for inflation, as they were at their all-time peak in February 1981.

He said this means that the overall impact on the economy should be lower this time around than during that period, when the oil shocks of the 1970s and early 1980s were enough to push the country into a series of recessions.

Greenspan said that so far this year, the rise in energy has probably trimmed the gross domestic product by about 0.75 percentage point, far less than the shocks of two decades ago.

However, Greenspan warned, "Obviously, the risk of more serious negative consequences would intensify if oil prices were to move materially higher."

However, he said he believed that existing technology and improvements spurred by the increase in prices should be sufficient to ``ensure the needed supplies (of energy) for a very long while."

Greenspan in his comments Friday made no reference to the Fed's current drive to raise interest rates to make sure that a rebounding economy does not generate unwanted inflationary pressures.

The central bank has boosted its key policy instrument, the federal funds rate, from a 46-year low of 1 percent to 1.75 percent currently, making quarter-point moves at its meetings in June, August and September.

Analysts believe the Fed will keep raising rates at a moderate pace for the rest of this year.

Greenspan, a conservative economist who sets great store in the power of free markets to govern the economy, said he believed that market forces would act as they did in the 1970s to buffer the economy from the shocks of rising prices.

"Although OPEC production quotas have been a significant factor in price determination for a third of a century, the story since 1973 has been as much about the power of markets as it has been about power over markets," Greenspan said. "The signals provided by market prices have eventually resolved even the most seemingly insurmountable difficulties of inadequate domestic supply in the United States."

Greenspan did not make any comments on current economic conditions although he said last month that he believed the economy had ``regained some traction" after a slowdown in activity in late spring that he blamed on this year's sharp spike in energy costs.

Higher Fuel Costs Starting to Hit Consumers

NYT, Oct. 12, By EDUARDO PORTER

For Ruby Ferguson, a waitress who lives in eastern Ohio, rising energy costs are finally starting to force some tough choices.

She no longer goes out to dinner in Canton as much as before, partly because of the expense of driving some 25 miles from her home in Munroe Falls. And she decided against visiting her sister in New Jersey, a journey that would have cost her \$75 to \$85 in gas alone.

Two weeks ago, Ms. Ferguson, who makes \$250 to \$300 a week serving tables at the Fairlawn Hilton in Akron, stopped her husband from turning on the heat at home even when the temperature at night fell to the low 40's.

"We need our gas prices to come down," she said. "We need to keep the heat on and be comfortable. It's a big deal; it interferes with people's lives."

As the price of energy resumes its upward march, the additional expense of gasoline and the looming cost of higher heating bills this winter are hitting ordinary Americans in their pocketbooks, slowing consumer spending on other goods and services. And they are looking for somebody to blame.

Energy costs first started squeezing households in the spring, when gasoline prices passed \$2 a gallon, holding down spending in June. Now, with the recent rise in oil prices beginning to push fuel costs up again, spending growth is flattening out once more.

More expensive energy is also beginning to take a toll on Americans' sense of well being, suggesting that some of that frustration may spill over into the political arena in November. Last month, one in 10 respondents to the University of Michigan's most recent consumer confidence survey said they were concerned about high-energy prices, according to Richard Curtin, the director of the survey. This was below the roughly 14 percent who mentioned the issue when gasoline prices first flared up in late spring, but far above the 1 or 2 percent that worried about gas prices in January.

Senator John Kerry's campaign has tried to milk the issue. One commercial by the Democratic candidate earlier this month said that President Bush's ties to Saudi Arabia were to blame for rising energy costs, stating that "the Saudi royal family gets special favors while our gas prices skyrocket."

Yesterday, Mr. Kerry blamed President Bush's mismanagement of the Iraq war for rising gas prices and accused Mr. Bush of favoring friends in the oil industry over American consumers.

The Kerry campaign also released a document suggesting that uncertainty stemming from the administration's policy in Iraq has added a "risk premium" of as much as \$15 to the price of each barrel of oil, which hit another record yesterday, at \$53.64 a barrel, on the New York Mercantile Exchange.

Are Americans blaming the administration for the rising cost of energy? To some extent, the answer is yes.

In June, 24 percent of respondents to a Los Angeles Times nationwide poll said that the Bush administration was largely responsible for the rise in gasoline prices, about the same as the 25 percent who blamed oil-producing nations in the Middle East.

In August, 42 percent of respondents to a Fox News national poll said that Mr. Kerry would be better at dealing with gas prices than would Mr. Bush, who was favored by 31 percent on that question.

"Gas prices are just an indication of how awful this administration is doing," said Trien Pham, a Vietnamese-American engineer in Royersford, Pa., who voted for Mr. Bush in 2000. "We've gone into Iraq for oil and nothing else. Now we have to pay more for it - the gas prices plus the overhead to support the troops in Iraq."

But it is not clear that the rising cost of energy is going to matter all that much to voters on Election Day. To start, oil prices have to vie for attention with a host of other issues preoccupying the electorate. In June, 7 percent of Americans thought the high cost of energy was the most important problem facing the nation, according to a Gallup poll. By September, the proportion had declined to 1 percent.

According to the National Association of Convenience Stores, motorists reacted to rising gas prices mostly by trading down on the octane scale, from premium to regular, and did not do much else.

"We do not see it affecting demand for gasoline," said Scott Hartman, who owns 50 gas stations in south-central Pennsylvania.

While extra energy costs have taken a sharp bite out of those with relatively modest incomes, oil's overall economic impact has been muted so far. In an analysis sent to clients earlier this month, economists at J. P. Morgan estimated that expensive oil would shave a percentage point from overall economic activity this year, mostly because of gasoline prices eroding consumer spending. They argued that consumers have already felt most of the hit, so spending should be stronger toward the end of the year.

But if energy prices keep rising in coming weeks, that confidence could prove premature. Futures prices for natural gas are moving ahead, as are the prices of crude oil on commodity markets. Though the price of gasoline at the pump has not yet returned to its spring peak, it is getting closer.

On Oct. 4, the average price of regular gas at the pump reached almost \$1.94 a gallon, 2 cents above the price a week earlier and just 12 cents under its May high, according to the Energy Department.

People drive less in the autumn than in the summer, so rising gasoline prices could lose some of their bite. But it is starting to get colder in many parts of the country, and many people will soon receive sharply higher heating bills.

The Energy Department estimates that households will spend 15 percent more on natural gas this winter than last year. Heating oil bills should be roughly 28 percent higher, the department estimated, and propane expenditures could be up 22 percent.

Ultimately, however, any political repercussions could well be muted because of the timing of the big energy price moves. True, the economy has started showing further signs of weakness. Big retailers from Wal-Mart to Sears reported relatively modest sales in September. Employment growth in September, at under 100,000, failed for the fourth consecutive month to keep pace with the normal increase in working-age population.

But whether much additional pain from higher prices will be felt in the three weeks before the election seems doubtful.

James Hamilton, an economist at the University of California, San Diego, said that he thought most of the economic impact from this year's energy jolt would not be felt until 2005, as automakers and other companies struggle to adjust to thriftier, more energy-conscious consumers.

People will no doubt point their fingers at the government, he said, but for the political system a lot of the steam may be taken out of the issue by then.

"There's no question people blame the administration, rightly or wrongly," Mr. Hamilton said. "But there will be no significant ramifications of this until after the election, so I don't think it will be very significant in the election."

Avista seeks review of denied increase in Idaho gas, electric rates

The Spokesman-Review, Oct. 13

Avista Corp. announced Tuesday that it will ask Idaho regulators to reconsider their decision not to grant the company's entire natural gas and electric rate increase request.

The Idaho Public Utilities Commission issued an order approving the company's new rates for Idaho customers on Friday. The commission decided not to allow Avista to charge customers for \$14.7 million worth of costs primarily incurred buying gas to power a generating facility and building a new natural gas-fired combustion turbine.

The decision, coupled with adjustments to an existing surcharge, resulted in rates substantially lower than what Avista had requested. The company originally had asked to raise electric rates for its Idaho customers by 24 percent, but later revised that to 21 percent. Avista had asked that natural gas rates for those customers be raised by 9 percent, then revised that to 7.8 percent.

The commission approved an increase in electric rates of only 1.9 percent. However, the increase varies among different types of customers. Residential customers will see different increases, for example, than industrial customers. The average residential customer using 941 kilowatt-hours per month would see a \$4 increase, about 7 percent more.

As for natural gas, the commission approved a 6 percent increase.

When coupled with the company's pass-through of higher wholesale gas prices, the average residential customer using 73 therms per month will see an increase of almost \$13 per month, or 21 percent.

Avista serves 109,000 electric customers and 62,000 natural gas customers in Idaho.

In making its decision, the commission made note of the high level of public comment. More than 100 people attended three public hearings. More than 1,500 people signed a petition protesting the rate increases. About half of the comments received were from low- and fixed-income customers concerned about rate increases.

In a strongly worded decision, the commission criticized Avista for trying to charge customers for gas purchases it felt were "highly irregular" and "speculative." Due to some gas contracts the company entered into in 2001 when prices were high and fluctuating wildly, the company purchased gas for its generating facilities that it ended up not using and instead selling at a loss.

The company making the purchases was Avista's unregulated energy marketing affiliate, Avista Energy.

"When it chose to act without regulatory approval -- it was risking its own money, not its ratepayers," the commission wrote in its decision. "We find that as to -- (the) losses, there should be a sharing of risk between ratepayers and shareholders."

Avista officials said it bought that gas in 2001 to run a generating plant and produce electricity. Then the company learned it would be cheaper to buy electricity on the market than to run the plant to produce it. Avista Utilities Vice President Kelly Norwood said the company is forced to try to make the best economic decision for customers while prices are fluctuating.

"They're looking back now and saying, 'after the fact, it doesn't look reasonable,' " Norwood said.

The commission also didn't allow Avista to charge customers the full amount of cost overruns in its construction of a gas-fired combustion turbine in Spokane Valley. The \$21 million Boulder Park project came in more than 50 percent over-budget, at about \$32 million.

"We expect a utility such as Avista to have the expertise and experience to plan, construct and manage any project it undertakes at a reasonable cost," the commission wrote. "Ratepayers will not be asked to pay for what we find to be a Company learning experience."

Norwood said Avista officials are still "digesting" the full 64-page order, but plan to file a petition asking the commission to reconsider its decision within the next three weeks.

"What we've been doing over the past several years is trying to get back to financial health," said Norwood, who emphasized that Avista has proposed recovering costs over time to minimize the impact on customers. Long-term, he said, Avista's financial health is in the best interests of its shareholders and its customers.

Congress Clears the Way for Construction of Alaska Natural Gas Pipeline, NGI Reports

Oct. 13, 2004 Natural Gas Intelligence (NGI). James Geanakos.

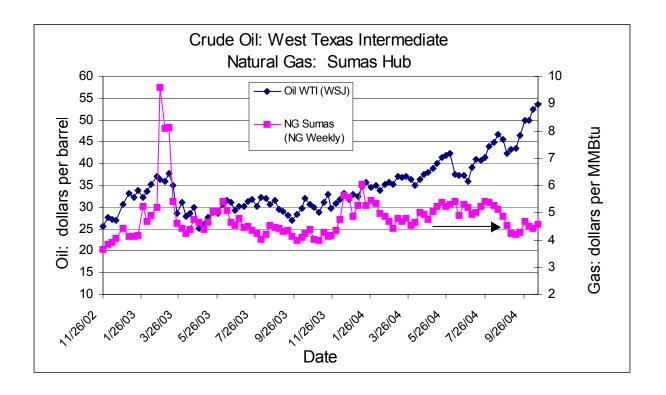
A major step by the U.S. Congress toward ensuring long term natural gas supplies went virtually unnoticed this week as the departing lawmakers slipped an \$18 billion loan guarantee and authorizations for a mega-natural gas pipeline from Alaska's North Slope to the lower 48 states into last-minute appropriations and tax measures, Natural Gas Intelligence reported.

The project to add 1,800 miles of pipeline to the already existing infrastructure to deliver 4.5 billion cubic feet a day (Bcf/d) to U.S. markets in the West and Midwest still has a long way to go, but the enabling measures approved Monday "provide us with what we need from the U.S. Congress for this project," Dave MacDowell, a spokesman for the Alaska operations of BP, one of the three major Alaska gas producers, told NGI.

The legislation provides the impetus for the project to gain sponsors, seek financing, complete engineering studies and pursue the necessary permits and authorizations along the pipeline route from north of the Arctic Circle, through Alaska, the Yukon and Alberta. Canadian pipeline operator and project proponent, TransCanada Corp., has said options are wide open for assembling a sponsor consortium that could include gas producers, other pipelines and aboriginal corporations participating in any or all of the pipeline construction.

Petroleum futures headed higher, trading at above \$55 per barrel on Friday. The upward price pressure was caused by some of the usual suspects: high global demand, limited (and well timed) strikes by oil workers in Norway and Nigeria, as well as the continued loss of 0.45 million barrels per day of Gulf of Mexico crude oil production (Hurricane Ivan). Spot wholesale gasoline prices have havered around \$1.40 per cellon for the last week, with the national rateil average price.

have hovered around \$1.40 per gallon for the last week, with the national retail average price exceeding \$2 per gallon again, and Washington state average price at \$2.07 per gallon. Diesel and home heating oil prices have continued their rapid climb, with state retail diesel prices approaching \$2.40 per gallon and heating oil at approximately \$2.1 per gallon. Natural gas prices have been increasing slowly as the winter heating season approaches.



Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 10/26): 47,387 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$39.7 – 52.4 per MWh, Ave. = \$45.3

Approximate change from previous week
"Normal" price range, before 5/00
\$\\$\\$\\$\$+5.3 per MWh
\$\\$\\$20-\$\\$40 per MWh

Petroleum, West Texas Intermediate: \$55.15per barrel (year ago: \$29.22)
Seattle gasoline price (10/18)
\$2.09 per gallon (year ago \$1.65),

Natural gas, Sumas Hub:
 Approximate change from last week.
 \$6.15 per million British Thermal Units (year ago \$4.03)
 Oil: +1.28 \$ per barrel; Nat. gas: +1.67 \$ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o July 22, 2004: Third consecutive day of record electricity use.
 - o A stage 1 alert, due to an unexpected heat wave, was declared on Mar. 31, 2004.
 - o 20 minute outage in So. Cal. on March 8, 2004 due to operator error.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001

4. Energy News Headlines from around the Nation

- o Conservation Tariff: Ending Customers vs. Shareholders' Impasse? (Energy Pulse, Oct. 20)
- o The tightening oil market: Crisis in putting together energy data (WSJ, Oct. 26)
- o Manure energy quagmire in California (Sac Bee, Oct 27)

С

5. River and Snow Pack Information (Updated: Oct. 20, 2004)

- Observed Sept. stream flow at The Dalles: 122.8% of average,
- Observed Aug precipitation above The Dalles: 148% of average,
- Observed Jan.-July runoff at The Dalles: 83 MAF, 77% of normal,
- Federal hydropower generation in Aug.: 7,033 aMW, 1995-2002 average: 8,166 aMW.

6. Energy Conservation Achievement (Updated: Feb. 11, 2004)

• State Agencies: From Oct thru Dec 2003 electrical usage was 9% less and natural gas usage was 21.3% less compared to the same period in 2000.

7. Power Exchanged: (Updated: Oct. 26, 2004)

• Average flow of power during the last 30 days

o California (exported to) 2,148 MW o Canada (exported to) 1,395 MW o Net power export: 3,543 MW

Conservation Tariff: Ending Customers vs. Shareholders' Impasse? By Gary Clouser, Energy Pulse, Oct 20.

Traditional utility ratemaking pits the interests of utility shareholders against customers in energy conservation and efficiency efforts. That is a situation that Northwest Natural proposes to change through what it calls a "conservation tariff."

Speaking recently at a Bonneville Power Administration-sponsored conference entitled, "Energizing the Northwest, Northwest Natural CEO Mark Dodson, discussed the problem and his utility's response. "When we rely on volumetric rates to cover our fixed costs, we have a vested interest in customers using more energy. The more kilowatt hours or therms we sell, the greater our cost recovery. Conversely, if customers conserve and reduce their energy use, we are less able to recover our fixed costs. So the interests of customers are pitted against the interest of our companies, and our shareholder or owners. We are forced to choose between satisfying one group or the other," Dodson said. He added: "I firmly believe that no organization, public or private, will succeed if it regularly finds itself at cross-purposes with its customers." For all practical purposes, under the traditional structure, a utility can only meet its financial obligations if it meets or exceeds projected sales volumes.

To break that impasse, Northwest Natural made a compact with its customers and commission, which it calls a conservation tariff. The tariff basically said: If you don't penalize us for our efforts, we will do everything we can to encourage conservation.

The concept was simple, Dodson said. We have over the years established a baseline usage for our customers. Each year actual usage is affected by weather as well as price elasticity – that is, if the prices go up, customers tend to use less. We normalize our usage data for weather and price; any change in consumption beyond that is identified as conservation, Dodson said.

Getting regulatory approval and customer support was a long and painstaking process. "We were convinced that we needed the support of the state's consumer advocates before we took a proposal to the Oregon Commission. So we worked with the Citizens Utility Board and the NW Energy Coalition in designing the mechanism," Dodson said. The company filed the conservation tariff in June 2001, but it was not approved until October 2002. That approval has, for example, allowed the utility to successfully promote the sale of high-efficiency gas furnaces that can reduce heating load by 20-25%

Northwest Natural's conservation tariff has captured the attention of the industry. The basic concept is the same one recommended by the Edison Electric Institute and the Natural Resources Defense Council to National Association of Regulatory Utility Commissioners (NARUC) in November 2003. "To eliminate a powerful disincentive for energy efficiency and distributed-resource investment, we both support the use of modest, regular true-ups in rates to ensure that any fixed costs recovered in kilowatt-hour charges are not held hostage to any sales volumes," they said. In July 2004 Dodson, representing the American Gas Assn. and Ralph Cavanagh of the Natural Resources Defense Council presented a similar joint position to NARUC.

Dodson says the conservation tariff enables him to tout gas conversion for some purposes without appearing to be self-serving. He noted, for example, that the NW Planning Council has identified 100,000 electric water heaters in homes that NW Natural serves with gas. If those water heaters were converted to gas, Northwest Natural would not make any more money under the conservation tariff, but the council believes the state of Oregon would reduce its peak load demand for power by

over 400 MW. That is the equivalent of one of the new gas-fired generation plants in the queue for siting, and it saves gas, Dodson said.

When gas is burned to create electricity, between 45-75% of the energy value is lost. When it is used directly in applications, such as from the burner tip to heat water, only 5-10% of the energy value is lost, Dodson said. "At a time when we are all concerned about future energy supplies, does it make sense to waste half the value of the natural gas we're using? If possible, shouldn't we obviate the need to build power plants by using our resources more wisely?"

He continued: "For the sake of our society, our energy supplies and the long-term health of our businesses, we should be advocating the right energy source for the right use. Electricity, in many cases, should be used where it is the only or obvious best choice --- for lighting, power, irrigation, motors, etc., and I would be the first to acknowledge that. But where natural gas can be substituted for electricity, I believe saving the resource that would have been wasted to generate the electricity; natural gas should be the preferred choice."

Dodson, who also co-chairs Oregon's global warming commission, said "the power of public opinion, and the scope and depth of the environmental movement, cannot be ignored." While people argue over the science, I have been stunned at the level of public concern, he said. "People are demanding that something be done and we must respond. Not only do we have a compelling need to respond to people's concerns; it is right to be environmentally sensitive in the way we run our businesses," Dodson said.

"At Northwest Natural, we have learned that new ideas can succeed in the regulatory arena when the parties involve focus on the outcomes that benefit both customers and shareholders. To put these groups at odds with one another is unfair, unwise and bad energy policy," Dodson concluded.

Open Letter to Governor Schwarzenegger: Practical Environmentalism for California. Why Not Combine Efficiency and Renewables into an Energy Portfolio?

By Steve Heins, Energy Pulse, Oct. 22.

Dear Governor Schwarzenegger:

In a recent article in the New York Times Magazine section, David Brooks - a columnist on the Op-Ed page of The New York Times, a senior editor at The Weekly Standard, a contributing editor at Newsweek and the Atlantic Monthly, and a commentator on "The Newshour with Jim Lehrer" - described the current state of energy policy and politics in the U.S. as follows: "Republicans currently stand for production, the cultivation of existing technologies, and a somewhat callous disregard for the environment. Democrats stand for conservation, the cultivation of environmentally sensitive but unrealistic technologies and a sometimes callous disregard for economic growth." Frankly, we need to separate the discussion of energy policy from politics in such a way that it becomes either bipartisan or even non-partisan.

Without subscribing entirely to either stereotype offered by Mr. Brooks, it is worth observing the contradictions inherent in such energy policy discussions. In fact, there is a solution sandwiched in between the opposites of energy production and energy conservation, between existing technologies and unrealistic technologies, between callous disregard for the environment and callous disregard for economic development. The solution is combining energy efficiency and renewable energy into the same energy portfolio. In the case of California, this would allow you as

Thursday October 28, 2004

governor to develop a wide range of energy source options without precluding the important issues related to California's environment and economic development.

As you have observed in your "Agenda to Bring California Back," California already has electric rates that are 61% higher than other western states for residential customers and over 100% higher for businesses. Furthermore, with more than 10,000 Megawatts (or, the equivalent of 20 500-Megawatt power plants) of capacity still on the drawing boards, California can certainly expect significant upward pressure on electric rates for all customers when these plants come on-line.

While your call for a Renewable Portfolio Standard of 20% by 2010 has an environmentally pleasant ring, it is worth noting that the current state of renewable technology cannot economically support the increase in the renewable energy sources necessary. However, a combined approach to California's Portfolio Standard could easily provide 20% of the state total energy supply. After all, California's use of a portfolio standard by definition implies a broad diversification of assets to ensure a balancing of risk and a maximization of reward.

First, we would like to define energy efficiency as "the quickest, cleanest and cheapest source of new energy," which means it should be accorded at least the same respect and consideration that Renewables receive today. In fact, the American Council for an Energy Efficient Economy (ACEEE) has done a study recently, entitled "The Technical, Economic and Achievable Potential for Energy Efficiency in the United States: A Meta-Analysis of Recent Studies," that shows as much as a 24% reduction of all electricity usage could be achieved in the U.S., which means that as much as one hundred thousand Megawatts of savings is possible.

The fact is California's utilities and state regulators need to be able to treat energy efficiency as a supply side option, with an allowable return on investment. California's "Energy Action Plan" says as much, when it says California should "provide utilities with demand response and energy efficiency investment rewards comparable to the return on investment in new power and transmission projects." If given a return on energy efficiency competitive to the one they are given now for energy supply and production, utilities will be able to justify to their shareowners their investments to reduce demand and make energy efficiency a growing part of their business platform.

It is worth noting that neighboring Nevada already has introduced legislation, Assembly bill No. 429, relating to Nevada's Trust Fund for Renewable Energy and Energy Conservation. During the worst of your energy problems in 2001, California has already proven that it could reduce demand by 5% within the first year of the crisis, with as much as a 10% reduction in overall electrical consumption possible for California over the next decade. New evidence is emerging that California could cost-effectively reduce its electricity needs by at least 5,900 MW - the equivalent of 12 large power plants - over the next decade.

It has been estimated that the net benefits to California would be \$12 billion and the environmental benefit is significant. With California's leadership, one can imagine the economic and environmental benefits of Energy Efficiency nationally if we coordinate efforts throughout the U.S. By motivating utilities, businesses and individuals to employ the positive economics of both Energy Efficiency and Renewables, California will have a 21st Century solution to the vexing problems involving energy, efficiency, economics and environmental issues. By doing so, California can achieve a practical environmentalism, which preserves California's quality of life while revitalizing its economic development.

Respectfully, Steve Heins Director of Corporate Communication Orion Energy Systems

The Tightening Oil Market: IEA Warns of 'Looming Crisis' In Putting Together Energy Data

WSJ, Oct. 26

The International Energy Agency warned of "a looming crisis" in compiling its energy data, which often sway world prices for oil and natural gas and affect the planning of the biggest energy producers.

In its long-term World Energy Outlook, the agency, which represents the interests of the Organization for Economic Cooperation and Development's 26 member countries, said it took the "unusual step of raising this issue because we believe there is an urgent need to preserve the reliability of our statistical base."

The agency's monthly supply, demand and inventories data are closely watched, but there have been murmurs of dismay from some in the industry over the number and degree of revisions it makes, particularly when it comes to gauging global oil demand.

In February, the Organization of Petroleum Exporting Countries cited the agency's estimate of weakening seasonal demand as one of the reasons to cut back output. The degree of surging demand from China and others wasn't apparent, eventually catching the oil markets off guard and contributing to record high crude-oil prices.

In its October monthly oil-market report, the agency said world oil demand in the third quarter was 600,000 barrels a day more than it had forecast a month previously. "A more reliable and transparent system is needed urgently, especially for investor confidence," said Fatih Birol, the agency's chief economist.

The agency pinned some of the blame on governments. National data, it said, often are subject to lapses and frequently prove inconsistent. "These lapses compromise the completeness of our statistics. They could seriously affect any type of analysis, including modeling and forecasting," the agency said.

Other causes for inaccurate data gathering it cited included:

- -- Liberalization, as state-owned utilities have been replaced with hundreds of independent companies;
- -- Governments' failure to fund their own statistics, resulting in holes in the data;
- -- New data on hard-to-measure energy issues such as renewables, conservation policies and emissions.

The IEA said it seeks higher statistical standards and better funding from contributing governments, adding that the legal framework for data gathering must be revisited.

One solution, it said, is the three-year-old Joint Oil Data Initiative between OPEC, the IEA, Eurostat and others. The goal is to create a reliable system that allows future crude production, including oil reserves and the performance of existing fields, to be monitored.

The agency's executive director, Claude Mandil, said progress had been slower than expected but noted that at the Joint Oil Data Initiative's latest meeting about two weeks ago, China agreed to provide up-to-date demand data within the next six months.

"The earth's oil resources are adequate to 2030 and well beyond, but not everybody is convinced because the data are uncertain. This is bad for investors. We are not sure the private money will come to finance oil development," Mr. Mandil said.

"We have to convince all the players -- OPEC, oil companies and the financial bodies -- that it is worthwhile to improve the current situation," he added.

Manure energy quagmire in California

Troubles beset dairy farm projects

Sacramento Bee, Oct. 27

Amid smiles and handshakes, Lodi dairyman Larry Castelanelli's new methane-powered generator chugged to life last week.

California's newest industry - a \$7 million plan to make power from manure - finally was rolling.

By the end of the year, 12 of 14 state-funded pilot projects on dairy power are expected to be operating, and three more dairy generators are planned next year for southern Sacramento County.

The stakes are high, as the state tries to reduce dairy odor, meet renewable energy targets and curtail emissions of greenhouse gases linked to global warming.

But so-called biogas plants, already more than two years behind schedule in California, are not sure bets. The Central Valley's potential for manure-based energy could fizzle without more evidence about environmental benefits, cooperation from power companies and new incentives to turn pollution into power.

Since its creation during the 2001 energy crisis, the Dairy Power Production Program, under the auspices of the California Energy Commission, has been hampered by technical problems at dairies, along with low milk prices and state budget cuts.

Much of the problem has been pinned on power companies, where obstacles became so severe they were addressed by a state Senate committee in August.

"(Power companies) just don't want to help," said Mark Moser, president of Berkeley-based RCM Digesters Inc., which designed Castelanelli's methane digester. "The more high-priced energy they sell, the better it is for them."

In one of many tussles, dairy power backers fought a package of tariffs proposed by the state's big three power companies that some environmentalists and farm interests believed would undermine biogas.

And there are more practical problems. Sustainable Conservation, a San Francisco environmental group that supports dairy power, said utilities are taking an average of one year to approve permits connecting biogas facilities to the power grid.

"The common theme ... (is) bureaucratic delays, excessive electrical equipment requirements - often beyond what other states require - costly studies and uncertainty of outcome," said one recent report by the conservation group.

Thursday October 28, 2004

Many complaints are directed at Pacific Gas and Electric Co., which services 70,000 square miles between Bakersfield and Eureka. Company officials say they support dairy power through "self-generation" grants, and they are trying to reduce the confusion that has slowed progress.

"It's been a little difficult at times," said Mike Steele, the PG&E coordinator of the Castelanelli project. "We do our utmost ... to make these projects successful."

Dairy power expert George Simons at the California Energy Commission, the state's main energy policy agency, said startup problems are beginning to dissolve as the first dairy digesters get online.

For power companies, small independent producers can create complications and even safety problems in rural areas, said PG&E official Kim Whitsel.

"A lot of times, folks look at this as plugging in the toaster, but it's very far from that," she said.

PG&E plans to meet in December with dairy interests and reduce their uncertainties.

California is home to 1.7 million dairy cows. Many are penned in corrals between Sacramento and Bakersfield. The state's 1,950 dairies generate an estimated 16 million tons of manure - in addition to liquid waste - each year.

Engineers have tried to turn manure into power for decades, but the idea is now starting to gain widespread attention in California because of demands to reduce pollution and reduce peak power use.

Under current goals, the state aims to gather 20 percent of its energy from renewable resources by 2010.

California's 14 pilot projects cost an average of \$1.2 million each. About half the money comes from state grants, and federal money also cuts costs. Participating dairies are expected to generate 3.5 megawatts, enough for about 3,500 homes.

About a dozen methane-powered plants operate nationally, but Simons at the Energy Commission said 40 percent of California dairies could have biogas running within a decade.

As Castelanelli's rig sloshed through the mud past milking sheds last week, he shared uncertainties about the \$773,000 project, 41 percent of which was paid for by the state.

At the Lodi dairy, manure is routed into a 600-foot-long by 200-foot-wide lagoon, where bacteria break down the manure. The resulting methane gas is captured and used to fuel a 160-kilowatt generator that operates around the clock.

Castelanelli sends his electricity to PG&E, which allows the dairy to subtract its power production from its power bill under 2002 legislation that runs out at the end of next year. Dairies are expected to save between \$60,000 and \$360,000 a year in electricity costs.

"If I don't get enough (money) to change the oil and maintain the engine, why am I doing this?" Castelanelli said. "A year from now, I'll tell you if this was a good thing or not."

Others also are wondering how the promise will play out. State Treasurer Phil Angelides said Tuesday that he was not convinced about the environmental benefits and announced a freeze on dairy project spending from one state pollution prevention fund.

Angelides was reacting to concerns that the state may have been backing projects that didn't have a proven environmental benefit. The treasurer's action won't stop the dairy power program - that

money comes from another pot - but it does raise political and environmental questions about the technology's future.

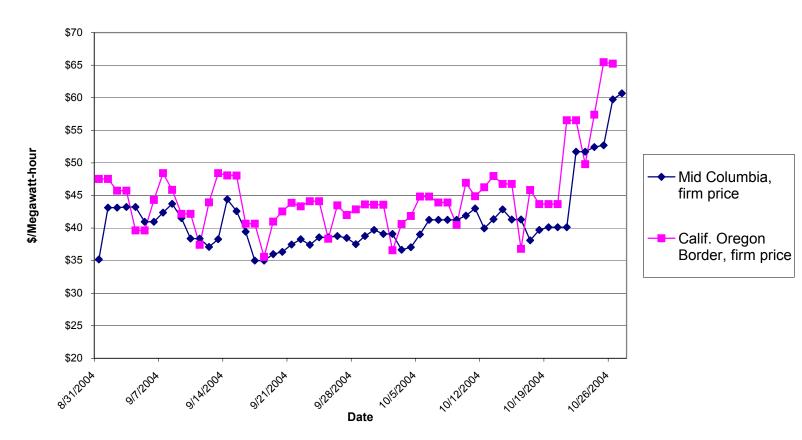
The Sierra Club, for instance, opposes subsidies for methane power plants because of concerns about huge dairies that can number several thousand cows. The environmental group says manure-based energy should not be considered "renewable" because it is the byproduct of an "inefficient ... (and) wasteful" industry.

Regardless, dairy power backers are drafting legislation to expand state support. Also under way in southern Sacramento County are three more dairy power plants.

Aware of the slow startups elsewhere, the Sacramento Municipal Utility District promises a smooth ride for dairies and has helped several owners apply for federal grants.

Petroleum futures closed at above \$55 per barrel on Tuesday. Natural gas futures prices have climbed rapidly in the last two weeks and are now hovering around \$8 per thousand cubic feet (Mcf), up over \$3 per Mcf from their September prices. Electricity spot market prices are up steeply over the two weeks moving into the \$45 – 60 per Megawatt-hour (MWh) range, more than 50 percent higher than the price range of this summer. These three primary energy sources (petroleum and related refined products, natural gas, and electricity) are all interrelated, and track each other to a certain degree. Prices of natural gas and electricity vary more with the seasons as they are strongly linked with space heating and cooling. The table shows Pacific Northwest electricity spot market prices over the last 2 months.

Electricity Spot Market Prices - Northwest



Energy Division, Office of Trade and Economic Development

Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Thursday, 11/04): 47,486 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$47.8–60.7 per MWh, Ave. = \$55.5

Approximate change from previous week
 "Normal" price range, before 5/00
 \$\frac{\$+10.2\$ per MWh}\$
 \$20-\$40 per MWh

Petroleum, West Texas Intermediate: \$50.89 per barrel (year ago: \$28.90)
Seattle gasoline price (11/02)
\$2.09 per gallon (year ago \$1.65),

• Natural gas, Sumas Hub: \$6.42 per million British Thermal Units (year ago \$3.98)

• Approximate change from last week. Oil: -4.16 \$ per barrel; Nat. gas: +0.27 \$ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o July 22, 2004: Third consecutive day of record electricity use.
 - o A stage 1 alert, due to an unexpected heat wave, was declared on Mar. 31, 2004.
 - o 20 minute outage in So. Cal. on March 8, 2004 due to operator error.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001

4. Energy News Headlines from around the Nation

- o Average household energy costs up \$1000 in four years (The Olympian, Nov. 1)
- o Deadline for CA power reserves moved up (LA Times, Oct. 30)
- o Peering at the sticker price on a cleaner car (NYT, Nov. 2)

5. River and Snow Pack Information (Updated: Oct. 20, 2004)

- Observed Sept. stream flow at The Dalles: 122.8% of average,
- Observed Aug precipitation above The Dalles: 148% of average,
- Observed Jan.-July runoff at The Dalles: 83 MAF, 77% of normal,
- Federal hydropower generation in Aug.: 7,033 aMW, 1995-2002 average: 8,166 aMW.
- Winter supply outlook: The region has a 1,000 average megawatts energy surplus. The likelihood of a power shortage for the winter of 2004-05 from generation system inadequacies is less than 1%.

6. Energy Conservation Achievement (Updated: Feb. 11, 2004)

• State Agencies: From Oct thru Dec 2003 electrical usage was 9% less and natural gas usage was 21.3% less compared to the same period in 2000.

7. Power Exchanged: (Updated: Nov. 3, 2004)

• Average flow of power during the last 30 days

o California (exported to) 2,218 MW o Canada (exported to) 1,148 MW o Net power export: 3,366 MW

Average household energy costs up \$1,000 over four years

Olympian staff, news services, Nov. 1

U.S. households spend about \$1,000 more a year on gasoline and heating bills today compared with four years ago, a leading consumer group said Friday.

Gas prices topping \$2 a gallon coupled with high natural gas and fuel-oil costs have raised the average household spending from about \$2,000 annually between 1995 and 2000 to an estimated \$3,000 this year, said Mark Cooper, research director at the Consumer Federation of America.

"Last spring and summer it was gasoline; now it is heating oil and diesel fuel that are setting records," Cooper said. "Household budgets are being continually pounded by these rising prices."

While energy costs have increased 50 percent since 2000, overall consumer prices rose a little more than 10 percent, according to the Bureau of Labor Statistics.

In Washington State, total annual energy costs were \$11 billion in 1998-99, climbing to \$15.1 billion in 2003-04, according to the energy division of the state Department of Community, Trade and Economic Development.

Energy prices are expected to remain relatively high over the next year, Cooper said.

Most of the increased energy costs come from higher crude prices, which have risen 70 percent during the past year, said Ron Planting, an economist at the American Petroleum Institute, a trade group representing oil companies.

Worldwide demand for oil is up, while supply has been a problem in Iraq, Nigeria and even in the Gulf of Mexico, he said.

But consumer groups point out that U.S. oil companies have reported record profits, such as:

- Exxon-Mobil Corp: A \$5.7 billion third-quarter profit, up 56 percent over a year ago.
- Chevron Texaco Corp: A \$3.2 billion third-quarter profit, up 62 percent.
- ConocoPhillips: A \$2 billion third-quarter profit, up 54 percent from a year ago.

Planting said oil companies have had some lean years when oil prices are low.

"It's a cyclical business, and some times are better than others," Planting said.

But the federal government has taken little action, such as requiring companies to hold a reserve supply of oil or gasoline, to rein in energy prices, Cooper said.

"We don't see a lot of relief for consumers unless there's a change of attitude in Washington," Cooper said.

Deadline for California Power Reserves Moved Up

■State regulators require utilities to get enough electricity for peak demand by June 2006.

By Marc Lifsher, LA Times Staff Writer, Oct. 30

State regulators, hoping to avoid electricity shortages and rolling blackouts, approved a controversial plan Thursday that significantly moves up the deadline for California utilities to create power reserves capable of handling peak summer demand.

On a 3-2 vote, the Public Utilities Commission ordered investor-owned utilities such as Southern

Thursday November 4, 2004

California Edison Co. to line up electricity supplies by June 2006 that are at least 15% greater than forecast needs. The deadline had been January 2008.

PUC President Michael Peevey likened the new deadline to "buying an insurance policy," saying he wasn't "willing to play Russian roulette with California's future."

"The next two summers are not going to be easy," he said. "The sooner we lock up existing capacity in contracts, the more we can rest easy."

The decision should bring "increased reliability for all California ratepayers," said Ashley Snee, a spokeswoman for Gov. Arnold Schwarzenegger, who had made the deadline change a key component of his plan to restructure the state's energy market.

Dissenting PUC members Loretta Lynch and Carl Wood accused the majority of caving in to political pressure from the governor and private power generators, which Lynch and Wood contended would profit from speeding up the call on utilities to sign new electricity contracts.

The commission created "a meaningless deadline to fulfill a political line in the sand," Lynch said.

A rush to lock up power too quickly could create a sellers' market for power providers, Wood said. Utilities would pay too much for electricity, he said, and pass those costs along to their customers.

Consumer advocates have attacked the plan as unneeded and potentially costly to ratepayers.

The debate over how much power utilities should have on hand and how quickly they should meet any supply goal is part of a larger argument over the best way to avoid the rolling blackouts and surging electricity bills that bedeviled the state during the energy crisis of 2000-01.

The effects of the crisis, which was caused in part by generating companies' market manipulations, is still being felt by the state's residential and business consumers, who pay some of the nation's highest utility rates.

Private power generators swarmed into California after the state deregulated its electricity market in 1996. They bought old plants from utilities and sought licenses for dozens of new, efficient, natural-gas-fired turbine facilities.

Many of those plants were never built or only partially constructed after Wall Street investors backed away from the projects in the wake of the energy crisis. Peevey's argument was that moving up the deadline for utilities to get electricity supplies under contract should lure power plant investors back to California.

The state's investor-owned utilities have taken different positions. San Diego Gas & Electric Co. supports the accelerated deadline, but Pacific Gas & Electric Co., which serves Northern and Central California, has been neutral. Edison was originally in opposition but said Thursday that it supported the PUC action after receiving assurances that the commission would be on guard against market manipulation.

Adding urgency to the debate, the California Energy Commission warned last week that the state's peak electricity demand grew 6% last summer, three times faster than expected. The commission also said that California's growing population and economy, combined with overtaxed transmission lines and aging power plants, could cause power reserves to fall well below levels considered safe by next summer if the state and region get hit with extremely hot weather. Weather forecasters say there is a 1-in-10 chance of abnormally high temperatures occurring in any given year.

The threat of blackouts is expected to be more acute in Southern California than in the north.

At the PUC on Thursday, the dire predictions outweighed fears about paying too much for power from private generators, said Commissioner Geoffrey Brown, who voted with the majority.

"The situation in 2005 and 2006 and beyond is not good," Brown said. "I think the price that we are paying is quite high, but we have to do it."

Peering at the Sticker on a Cleaner Car

By DANNY HAKIM, NYT, November 2, 2004

How much will it cost Californians to buy cooler cars?

The Golden State's roads are known for vintage T-birds, customized muscle cars and the Bentleys in Beverly Hills. But the state's regulators have a different kind of cool in mind - cars that emit significantly lower amounts of the gases that have been linked to global warming.

When California adopted the nation's first automotive greenhouse gas regulation in September, the auto industry and state regulators disagreed over how much it would all cost. The new regulation would require a 30 percent reduction, on average, in automotive greenhouse gas emissions - carbon dioxide, nitrous oxide and methane - by the 2016 model year.

The regulation, though directed at greenhouse gases, would probably demand an improvement in fuel economy of more than 40 percent. While smog-forming pollutants have been regulated for decades, catalytic converters can neutralize those emissions. But no filtration technology exists for greenhouse gas emissions; so cutting those emissions would have to come almost entirely from better fuel economy, though overhauling a car's air-conditioner could cut a modest amount.

The staff of the California Air Resources Board says the new regulation will add about \$1,000 to the cost of an average vehicle, but they said they believed that cost could be made up in five years in savings at the gasoline pump. The industry, by contrast, said it would add \$3,000, a cost that would never fully be made up by fuel savings.

If the regulation survives a legal challenge from the auto industry, New York has indicated it wants to follow California's lead. Several other Northeastern states that hew closely to California's air quality standards may also follow suit.

So how would cars and trucks have to change?

The Union of Concerned Scientists, a leading environmental group lobbying for the regulation, recently issued a report on how six specific vehicles could be modified to reduce global warming emissions by 40 percent or more, exceeding the California standards.

The group projected that, for a cost of \$1,960 per vehicle, the 2003 model Ford Explorer XLT, with a V-6 engine, could be modified to reduce its greenhouse gas production by 43 percent, a change that would improve fuel economy by more than 70 percent. (California's standards require that emissions from vehicles in the Explorer's weight class be reduced by 24.5 percent by 2016.) The report contends that buyers could make up that added cost in a little over three years by spending less on gasoline.

Thomas C. Austin, the consultant employed by the Alliance of Automobile Manufacturers, an industry lobbying group, to argue against the California regulation, conducted an analysis of the environmental group's projections. (The Ford Motor Company declined to offer its own analysis, referring questions to the alliance.)

Mr. Austin said that according to his analysis it would cost \$4,361 a vehicle to make the modifications proposed by the environmental group, and that some changes were not feasible. He also projected a somewhat lower reduction in greenhouse gas emissions. The two sides disagreed about almost every aspect of cost projections because of different methodologies and sources.

"They look for what's been published to support the case to encourage government agencies to further regulate," Mr. Austin said of the Union of Concerned Scientists, noting that to make its case, the group used "the most optimistic projections of fuel economy improvements and the most optimistic projections of cost."

Environmentalists and California regulators argue that the industry's recalcitrance is no surprise, citing its history of opposing everything from safety belts to small increases in fuel economy standards.

"The industry has a long track record of underestimating potential and overestimating cost," said Louise Bedsworth, the senior vehicles analyst at the Union of Concerned Scientists, who wrote the report. "We've seen it on many safety regulations; we continually see this pattern of pushing back, but in most areas we've seen them come through and succeed in the end."

Here are major modifications that Ms. Bedsworth would make to an Explorer to reduce greenhouse gas emissions and Mr. Austin's comments on those proposals.

Aerodynamics

For starters, the Explorer, a sport utility vehicle, would need to be a lot rounder. Ms. Bedsworth said automakers could modestly reduce emissions by improving aerodynamics because cars and trucks that are less wind resistant are more fuel-efficient.

"The Explorer is a pretty boxy S.U.V.," she said, a shape that makes it less aerodynamic.

Two current S.U.V.'s, Honda's Acura MDX and the Volvo XC90, made by Ford, are significantly more aerodynamic than the Explorer because of more rounded styling. The company could also cover the underside with paneling to smooth over nooks that hinder wind flow.

Mr. Austin said that Ms. Bedsworth's proposals would make the Explorer an ugly duckling. Some of the most iconic vehicles of the day are characterized by boxiness, from the Hummer to the Chrysler 300C.

"It's been decades since the auto industry showed you could produce vehicles that had half the drag coefficient than vehicles do today," he said. "But look at them. To most people, they're not the kind of cars they want to drive."

Ms. Bedsworth said Ford could also extend the Explorer's steel body over the tops of the tires to improve wind resistance, the way Honda designed the body of its tiny hybrid electric car, the Insight. But Mr. Austin said "most people think the Honda Insight is an ugly car."

Tweaking the Tires

Some new tires improve fuel efficiency with designs and materials that lessen the force needed to propel them down the road. Ms. Bedsworth says she believes further improvements are possible, but Mr. Austin said new federal tire pressure regulations might induce automakers to use larger tires that would impede efficiency gains.

Mike Wischhusen, the director of industry standards and government regulations at Michelin, said changing tire size would not necessarily change fuel economy performance by itself. His company's chief executive, Eduoard Michelin, recently outlined a goal of improving tire performance, as it relates to fuel economy, by 50 percent by 2020.

Under the Hood

Ms. Bedsworth said a variety of technologies could be combined to improve efficiency under the hood. A 42-volt starter generator, a mild form of hybrid technology, would allow the Explorer to shut down at stoplights.

The modified Explorer's engine would also combine three technologies that are in use today, though not all in one vehicle. The altered S.U.V. would have a diesel-like direct-injection gasoline engine that puts air and fuel directly into the engine cylinders rather than into precombustion chambers. The engine would also employ variable valve timing, a technology that ensures that the engine valves open and close in the most efficient manner, and cylinder deactivation, which shuts down one-half of the engine if it's not needed.

Mr. Austin said the last two technologies "don't make engineering sense" when packaged together because they were so similar in nature that using them jointly would not be worthwhile.

Ms. Bedsworth said Honda employed both technologies in its Odyssey minivans, but only one technology - variable valve timing or cylinder deactivation - was used in each minivan, depending on the version.

Ms. Bedsworth said there would still be some added benefit to using both. "The package still comes out to be cost effective," she said.

Increased engine efficiency would slightly increase, to 230 from 210, the horsepower of the 2003 model Explorer used in the study.

Improved Air-Conditioning

The industry is almost certain to argue in its legal challenge that the California regulation is preempted by Washington's authority to regulate fuel economy. But environmentalists point out that tweaking a vehicle's air-conditioning system is one way to get modest emissions reductions independent of fuel economy improvements.

The refrigerant used in automobile air-conditioners, known as HFC-134a, is a heat-trapping gas that is even more damaging than carbon dioxide. An improved air-conditioner could contain the gas better, or alternatively, a different type of refrigerant could be used.

Weight Loss?

Mr. Austin said to achieve the kind of emissions reductions proposed by the Union of Concerned Scientists, or the lesser reductions required by the California regulation, the Explorer would have to be significantly lighter. "Our analysis indicates that weight reduction is a more cost-effective

way to improve fuel economy than some of the other measures that would otherwise be required," Mr. Austin said.

The use of lightweight materials like aluminum, and the cost of redesign, would add more than \$1,000 to the vehicle cost, he said. But Ms. Bedsworth disagreed, saying that the Explorer's weight would not have to change to meet the emissions standards.

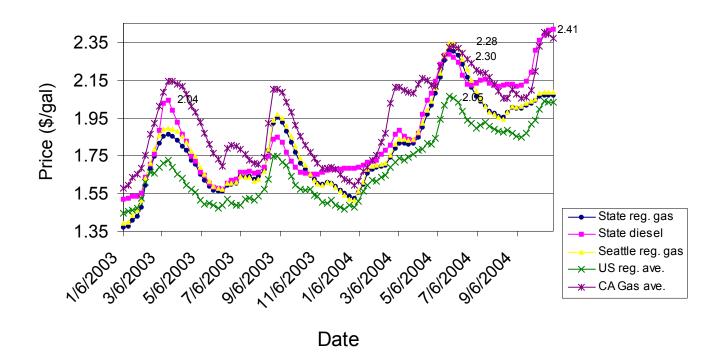
Savings at the Gas Pump

Mr. Austin disagreed with projections used by California regulators to gauge how many miles the average vehicle in the state is in service. Those projections are critical to making a cost-benefit analysis of the new standard. He also disputed the discount rate the Union of Concerned Scientists used to calculate the current value of future fuel savings.

Ms. Bedsworth said her projections were conservative, pointing to the \$1.68-a-gallon gas price used in her analysis. Gasoline costs \$2.39 a gallon, on average, in California, according to the most recent estimate from the Energy Information Administration.

Petroleum futures dropped over \$4 per barrel \$55 per barrel over the past week as supplies rose and speculators retreated from the market. Gasoline and diesel prices have stabilized and may retreat a bit as petroleum prices moderate, but are currently \$0.40 per gallon higher than the same time last year. Natural gas futures prices remained high at around \$8 per thousand cubic feet (Mcf), despite high winter storage inventories. Electricity spot market prices remained high, in the \$45 – 60 per Megawatt-hour (MWh) range, as we move into the winter heating (and lighting) season.

WA State Gasoline and Diesel Prices: Jan. 03 - Nov. 04



Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Thursday, 11/18): 47,346 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$45.0–50 per MWh, Ave. = \$46.8

Approximate change from previous week
 "Normal" price range, before 5/00
 \$-8.7 per MWh
 \$20-\$40 per MWh

Petroleum, West Texas Intermediate: \$46.85 per barrel (year ago: \$32.85)
Seattle gasoline price (11/17)
\$2.07 per gallon (year ago \$1.61),

• Natural gas, Sumas Hub: \$5.62 per million British Thermal Units (year ago \$4.14)

• Approximate change from last week. Oil: -4.04 \$ per barrel; Nat. gas: +0.72 \$ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o July 22, 2004: Third consecutive day of record electricity use.
 - o A stage 1 alert, due to an unexpected heat wave, was declared on Mar. 31, 2004.
 - o 20 minute outage in So. Cal. on March 8, 2004 due to operator error.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001

4. Energy News Headlines from around the Nation

- o County investor pushes wind project (The Columbian, Nov. 11)
- o Producer prices move up on energy costs (NYT, Nov. 16)
- o China barrels ahead in oil market (LA Times, Nov. 14)
- o Canada sets goal to cut car emissions (NYT, Nov. 18)

5. River and Snow Pack Information (Updated: Nov. 18, 2004)

- Observed Oct. stream flow at The Dalles: 109% of average.
- Observed Oct precipitation above The Dalles: 123% of average,
- Observed Jan.-July runoff at The Dalles: 83 MAF, 77% of normal,
- Federal hydropower generation in Aug.: 6,246 aMW, 1995-2002 average: 6,883 aMW.
- Winter supply outlook: The region has a 1,000 average megawatts energy surplus. The likelihood of a power shortage for the winter of 2004-05 from generation system inadequacies is less than 1%.

6. Energy Conservation Achievement (Updated: Feb. 11, 2004)

• State Agencies: From Oct thru Dec 2003 electrical usage was 9% less and natural gas usage was 21.3% less compared to the same period in 2000.

7. Power Exchanged: (Updated: Nov. 18, 2004)

• Average flow of power during the last 30 days

o California (exported to) 2,416 MW o Canada (exported to) 674 MW o Net power export: 3,090 MW

County investor pushes wind turbine project

November 11, 2004 By DEAN BAKER, Columbian staff writer

A La Center investor is negotiating with PacifiCorp for a \$120 million deal to build 63 huge wind turbines on the hills overlooking the Columbia River west of Arlington, Ore., 150 miles east of Vancouver

The proposed 104-megawatt project would be the closest wind farm yet to the Columbia River, said Chris Crowley, 50, president of Columbia Energy Partners.

The farm would start at the city limits of Arlington and extend west eight miles and south four miles, covering 14,000 acres, Crowley said.

PacifiCorp spokesman David Eskelsen said Crowley's organization is among 15 frontrunners angling for a wind power deal in Eastern Oregon.

"We have signed a memorandum of understanding with CEP and we're looking forward to working with them, but it doesn't mean we are committed," Eskelsen said.

He said PacifiCorp plans to make commitments by the end of the year.

PacifiCorp's Stan Watters, a senior vice president of commercial and trading, said in a press release his organization is considering the project as part of its plan to acquire up to 1,400 megawatts from renewable energy in the next 120 years.

PacifiCorp claims more than 8,300 megawatts of generation capacity from coal, hydro, renewable wind power, gas-fired combustion turbines and geothermal sources. It serves 1.5 million customers.

Crowley also is negotiating for a partnership with the Confederated Tribes of the Umatilla Indian Reservation

"We're still talking," said Debra Croswell, a spokesman for the Umatilla. "We've not made any final decisions or commitments"

The tribe expects to make a decision in the next few weeks, she said.

Crowley said each giant wind turbine would cost about \$1.5 million and produce 1.65 megawatts. He said the windmill-like towers would be from 65 to 80 meters, tall with blades 67 to 77 meters long.

The addition of 104 megawatts would boost by more than one-third Oregon's current wind energy production of 250 megawatts, PacifiCorp spokesmen said.

A megawatt is enough power to supply 400 to 900 homes. Clark County, for example, consumes an average of 500 megawatts.

Wind power is a growing enterprise in Eastern Washington and Eastern Oregon.

East of Crowley's proposed project are the 75-megawatt Klondike II Wind Project near Moro, Ore.; the 48-megawatt Nine Canyons Wind Project, eight miles southwest of Kennewick; and the 41-megawatt Eurus Combine Hills Wind Farm, near Milton-Freewater, Ore.

Other wind-power projects are pending in Klickitat County and Morrow and Wasco counties in Oregon, Crowley said.

Crowley said PacifiCorp chose his proposal for negotiation from among 100 respondents to a request for proposals issued in February.

He named the proposed farm the Ta-My-Y-Slah Wind Project, which in Umatilla language means "Where the wind blows down river."

"This project is the result of more than three years of hard work by many people and organizations. We are eager to take advantage of the recent extension of federal tax credit policies that make wind power highly cost-effective in the energy marketplace," Crowley said.

None of the interested parties would discuss what the cost or price of the wind power might be, however.

Crowley has been active in Clark County as a spokesman for Q-Prime, builders of the fairgrounds Amphitheater, and for the Hough Foundation, an organization attempting to turn Boise Cascade's former waste dump near the Port of Vancouver into a landfill for construction and demolition debris.

The Ta-My-Y-Slah project would include three parts, Crowley said: Mar-Lu 2, named for Crowley's wife, Martha, and daughter, Lurana; Aengus Flats Wind Farm, named for his son, Aengus; and BlalockWind Farm, named for a nearby canyon.

Crowley said he wants to enlarge the project to supply local power to the Arlington community as well as the Umatilla Reservation and businesses.

Producer Prices Jump on Energy Costs

NYT, November 16, 2004

Wholesale costs -- catapulted by more expensive energy and food -- soared last month by the largest amount in more than 14 years.

With inflation at the producer level accelerating sharply after months of being quite well-behaved, chances are rising the Federal Reserve will boost interest rates for a fifth time this year on Dec. 14.

The Producer Price Index, which measures the costs of goods before they reach store shelves, jumped by 1.7 percent in October, compared with a tiny 0.1 percent in September, the Labor Department reported Tuesday. The increase was the largest since January 1990.

Wholesale gasoline and home heating oil prices were up by 17 percent for the month.

"A period of pretty tranquil inflation has passed -- with a vengeance," said economist Ken Mayland, president of ClearView Economics.

On Wall Street, the report helped to push stocks lower. The Dow Jones industrials had lost 51 points and the Nasdaq was off 10 points in afternoon trading.

Wanting to make sure inflation doesn't become a threat to the economy, Chairman Alan Greenspan and his Federal Reserve colleagues embarked on a campaign in June to raise short-term interest rates from what had been extraordinarily low levels to more normal ones.

Tuesday's price report reinforced Fed policy-makers' conviction that they need to raise rates ``before anything bad happens," said Bill Cheney, chief economist at John Hancock Financial Services.

The Fed thus far has ordered four quarter-point rate increases. The most recent one, last week, left the federal funds rate, the Fed's main tool for influencing economic activity, at 2 percent.

In the PPI report, excluding energy and food costs, which can swing widely from month to month, core wholesale prices climbed in October by 0.3 percent for the second month in a row.

Economists had forecast a 0.6 percent increase in overall prices and a 0.1 percent increase for core prices.

The economy's soft patch in the spring and early summer had helped to keep wholesale prices relatively subdued, economists said. Now that the economy is picking up, inflation probably will be on the rise as well. A weaker U.S. dollar also is putting pressure on prices of imported goods, which gives U.S. producers more room to raise their prices.

Looking ahead, most economists don't foresee big spikes in wholesale prices like the one in October. Although energy prices are likely to remain high, crude oil costs have retreated from record highs. And food prices should calm down after the hurricane-related supply disruptions that contributed to October's big increase, analysts said.

``The recent spike ... should prove temporary," said a hopeful Mark Vitner, economist at Wachovia.

Still, economists were bracing for Wednesday's report on consumer prices for October. In light of the PPI figure, some raised their forecasts from a 0.4 percent rise to 0.5 percent, well above September's 0.2 percent.

From an economic point of view, inflation -- while clearly on the rise -- isn't currently a problem for the economy, analysts said.

Fed policy-makers, in a statement released after their meeting last week, said `inflation and longer-term inflation expectations remain well contained." They also said the economy appears to be growing `iat a moderate pace despite the rise in energy prices."

In October, energy prices soared 6.8 percent, the biggest increase since February 2003, and a turnaround from the 0.9 percent dip registered in September.

Wholesale gasoline prices in October surged 17.3 percent, the largest increase since June 2000. Home heating oil costs skyrocketed 17.9 percent, the largest advance since February 2003. Liquefied petroleum gas, such as propane, jumped 14.7 percent, the biggest gain since January.

Oil prices, which hit a record high of just over \$55 a barrel late last month, have moderated recently. Oil prices are hovering around \$47 a barrel.

Food prices, meanwhile, jumped 1.6 percent in October, compared with a tiny 0.1 percent rise in September. October's increase, the most in a year, was led by soaring costs for vegetables. Prices for fruits, beef and veal, and pork also went up.

Elsewhere in the report: Prices for passenger cars dropped 1.3 percent and costs for heavy motor trucks declined 0.7 percent. But costs for construction machinery and equipment jumped 2.7 percent in October, the largest increase since January 1980.

China Barrels Ahead in Oil Market

The country's hunt for the energy it needs to fuel its economy has led to deals in political hotspots, riling the U.S.

By Don Lee, LA Times Staff Writer, Nov. 14.

About a three-hour drive south of Shanghai, along the East China Sea, workers are building 52 gigantic tanks, each capable of holding more than 25 million gallons of oil — enough to supply every driver in China with gasoline for a month.

The storage tanks will help accommodate China's thirst for oil as it looks to fuel its booming economy. And it has plans to stockpile much, much more.

China, the world's second-largest consumer of oil after the United States, has plenty of cash to secure sources of petroleum and natural gas. But as aggressively as any nation, it is also cutting deals and forging alliances to get the energy it needs.

In South America and Africa, the Chinese government is helping build roads and ports in exchange for oil supply contracts. Beijing pledged to support oil-rich Russia in its bid to join the World Trade Organization as the two countries agreed that Russia would boost its exports of crude by rail to China.

And after a Chinese company's deal to develop an oil field in Iran, Beijing tacitly offered political support for Tehran's budding nuclear program. That put China in direct cross hairs of the Bush administration. The hunt for energy in the former Soviet Union and political hotspots such as Sudan is making China few friends in Washington.

China is "throwing around its economic muscle like crazy," said David Lampton, head of China studies at Johns Hopkins University's School of Advanced International Studies. "The Chinese are throwing incredible amounts of money to lock up long-term [energy] contracts. ... It's going to be a real topic of U.S.-China relations."

Some Chinese officials dismiss the threat of increased friction over energy.

"Although oil trade plays an important role in every field, it has a limited influence in Sino-American relations," said Han Wenke, vice director of the energy institute affiliated with the National Development and Reform Commission, an important regulatory agency of the Chinese central government.

Beijing's pursuit of energy is all about maintaining the nation's strong economic growth, which Communist Party leaders believe is the linchpin to social stability and ultimately their legitimacy. Oil and natural gas, and lots of both, are needed to keep factories running and to power all the new cars hitting freshly paved streets.

Only a decade ago, China shipped out more crude than it imported. This year it has sharply reduced exports to meet domestic needs — and it is now the world's second-largest importer of oil after the U.S.

Rising Demand

Surging Chinese demand, which has helped drive up oil prices to record levels in the last year, is expected to rise by double-digit growth rates annually for the next 15 years.

Although crude prices have settled back in recent days to less than \$50 a barrel, China's rapid

economic expansion is almost certain to add pricing pressure over the long haul. The country accounts for about 6% of world consumption; that's projected to rise to more than 9% in 2020, as Chinese oil fields dry up. (One-fifth of global oil demand comes from the United States.)

Wary of its increasing reliance on a few foreign oil suppliers, China has formulated a "go-out" strategy to diversify and expand its energy capabilities. The plan involves cooperating with 27 countries for oil exploration.

Beijing also is pouring money into developing its own pipelines and liquid natural gas terminals and launching an array of energy conservation programs at home, including imposing fuel economy standards on new cars.

One of China's biggest and latest energy ventures involves Iran, which the United States has sought to isolate for its alleged development of a covert nuclear arms program.

Late last month, Chinese and Iranian officials signed a preliminary deal in which China's **Sinopec Group** would develop Iran's Yadavarn oil field in exchange for Sinopec agreeing to buy millions of tons of Iranian liquefied natural gas. The Chinese government media valued the deal at \$70 billion.

A few days later, Chinese Foreign Minister Li Zhaoxing gave Iran important political support in the standoff over the Islamic republic's nuclear program. Li said Beijing opposed efforts to have the matter referred to the United Nations Security Council, although he stopped short of saying China would use its veto power if the case were sent there.

U.S. diplomatic sources have been reluctant to comment on the deal. Some analysts said it was unlikely that Beijing would jeopardize U.S. relations over an energy pact with Iran.

But others aren't so sure.

"There is a rationale from Beijing that is very dominant: If you can supply oil and do business, we would like to sign a deal," said Wenran Jiang, a political scientist at the University of Alberta in Canada. "China is very non-ideological in that sense. They will think about it, but they're not driven by the strategic interest in Washington."

Sudan is another example. Among China's African energy partners, which together provide about 20% of the country's oil and natural gas, the single largest is Sudan. Since the late '90s, Chinese oil companies have poured hundreds of millions of dollars into developing oil fields, a pipeline and a refinery.

No Apologies

Despite long-running criticisms by the United States and international groups about human rights abuses in Sudan, Beijing makes no apologies. When pressed on the issue, Chinese foreign officials have been quoted as saying simply that business is business.

In Africa, China has also signed deals to buy oil from Nigeria, Gabon, Cameroon and Angola. Last year China extended a \$2-billion loan to Angola in exchange for 10,000 barrels of crude oil a day.

He Jun, a senior analyst at Beijing-based Anbound Strategic Consulting Co., doesn't think China will let itself become involved too heavily in sensitive African nations such as Sudan.

"China's main purpose is still to develop its economy under a peaceful circumstance," he said. Others note that the U.S. and other big consumers of oil also have bought energy supplies from unsavory governments.

For China, more promising are its efforts closer to home. In September, construction crews began work on a 770-mile pipeline running from the oil-abundant Caspian Sea coast in Kazakhstan to China's western border, connecting with another trunk line all the way to China's east coast. The pipeline's initial capacity would be about 10 million tons of crude a year, said Matthew Cairns of Economy .com in Sydney, Australia.

Earlier, during a visit to Russia by Chinese Premier Wen Jiabao, the two countries reached the agreement about Russia exporting more crude to China. Cairns said it was no coincidence then that Wen promised to give Russia support for its WTO bid.

"It's a very cunning political maneuver," Cairns said.

In Russia, China also has sought a crude oil pipeline from eastern Siberia to Daqing in northeast China, to have ready access to supplies. But Japan appears to have won its bid to have the pipeline routed to the Russian port city of Nakhodka on the Sea of Japan.

Japanese and Chinese companies have clashed more openly over the exploration of natural gas in the East China Sea. Tokyo is worried that China would siphon gas from the Japanese side of the ocean bed, and has insisted that China provide details about the natural gas field.

Some political analysts say the competition for energy will severely test the relations of China and Japan in particular. But energy diplomacy also raises new challenges for the West, as the economic and political center in Asia shifts from the United States and Japan to China.

Heightened geopolitical tensions over China's oil imports comes as little surprise to Jeffrey Logan, China program manager at the Paris-based International Energy Agency.

"It's only natural," he said. "The world is struggling to learn more about China. As China enters the world more and more, it's going to depend on the world's resources more and more."

Canada Sets Goal to Cut Car Emissions

By DANNY HAKIM, November 18, 2004

Two top Canadian ministers said Wednesday that they had resolved to cut global-warming emissions of cars and trucks sold in Canada by 25 percent by the end of the decade.

The commitment means that the auto industry faces steep cuts in greenhouse gases in Canada as well as in California and the Northeastern United States, a geographic expanse that encompasses nearly one-third of the cars and trucks sold in North America.

Thursday November 18, 2004

The Canadian ministers said they expected to conclude soon several years of negotiations with the auto industry over the government's 25 percent emissions reduction goal, and they made clear in an unusual joint interview Wednesday that they would not settle for a lower reduction number.

"We're very clear where we want to go," said John Efford, Canada's natural resources minister. "We are not backing off from our position. Are we going to say 10 percent is O.K.? Fifteen percent? No. Twenty-five percent is our goal and the auto industry clearly understands that."

Stéphane Dion, Canada's environment minister, said "the fact that California has moved, the fact that some northern states like Maine and New York are saying that they are considering to take the same regulations as California, if you add Canada to that, it's a third of the market. I don't see why North America can't be a leader instead of a follower."

Seven Northeastern states follow California's air quality regulations, and in a meeting earlier this month representatives from those states indicated they were likely to follow California's new greenhouse gas regulation, adopted in September, which lays out a 30 percent emissions reduction by 2016.

The California regulation still faces an almost certain legal challenge from the auto industry.

Mr. Dion and Mr. Efford also met Wednesday with Fran Pavley, the California assemblywoman who sponsored that state's greenhouse gas regulation. Ms. Pavley brought a letter from a top official in Gov. Arnold Schwarzenegger's administration seeking to work cooperatively with Canada on the issue. Mr. Dion has said he planned to visit the state to further study its plan.

"We can drive the market forces," said Ms. Pavley. "We can leverage the market forces if California joins with some states in the United States and Canada, which will help encourage the automobile manufacturers."

Automakers strongly oppose the proposed curbs on greenhouse gas emissions because they would be forced to substantially improve the fuel economy of the cars and trucks they make.

Mark Nantais, president of the Canadian Vehicle Manufacturers' Association, said a 25 percent emissions reduction would require a costly reinvention of Canada's vehicles in a very short time.

"Basically, it means that roughly 95 percent of the passenger cars in Canada won't make the cut," he said. "We've told the government that we don't think their intent was really to cut greenhouse gas emissions in a fashion that's not sustainable, or place an undue burden on one sector over another. We're hoping we'll have a reasoned approach on this."

Regulating greenhouse gases like carbon dioxide and methane is a separate issue from regulating emissions of smog-forming particles that come from the tailpipe, which can be filtered by using a catalytic converter. No such device exists to filter carbon dioxide, so automakers will have to substantially improve fuel economy to cut those emissions.

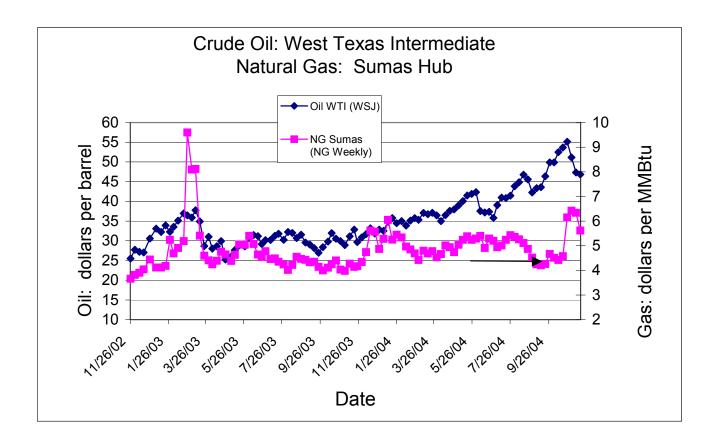
Environmentalists regard the California regulation as increasingly important after the re-election of President Bush, who has opposed greenhouse gas regulations, including the Kyoto agreement, a global pact aimed at cutting emissions. They also say that technologies like hybrid electric cars, including the Toyota Prius, are proof that the industry already has the technology to exceed the proposals.

Because California's air quality rules predated those of the federal government, California is allowed under the Clean Air Act to set its own rules. Other states can either follow all of

Washington's air rules or all of California's more stringent rules. Earlier this month, representatives of the seven Northeastern states that follow California's air regulations met.

"The indication was that none planned to alter their adherence to the program," said Ken Colburn, the president of the Northeast States for Coordinated Air Use Management, which hosted the meeting. The states that currently follow or plan to follow California's air rules are New York, New Jersey, Connecticut, Massachusetts, Maine, Vermont and Rhode Island.

Energy prices have trended down the last three weeks. Petroleum futures dropped over \$4, to \$47 per barrel, over the past week as supplies rose and demand eased a bit. Gasoline, diesel and heating oil prices have retreated about 5-10 cents per gallon as petroleum prices moderate, but are currently 40-60 cents per gallon higher than the same time last year. Natural gas futures prices have declined about 15 percent to about \$5.6 per thousand cubic feet (Mcf). Electricity spot market prices remained high, in the \$45 – 50 per Megawatt-hour (MWh) range, as we move into the winter heating (and lighting) season.



Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Thursday, 11/23): 48,913 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$42.0–49 per MWh, Ave. = \$44.7

Approximate change from previous week
"Normal" price range, before 5/00
\$20-\$40 per MWh

Petroleum, West Texas Intermediate: \$48.75 per barrel (year ago: \$32.85)
Seattle gasoline price (11/23)
\$2.05 per gallon (year ago \$1.61),

Natural gas, Sumas Hub:
 Approximate change from last week.
 \$5.16 per million British Thermal Units (year ago \$4.14)
 Oil: +1.10 \$ per barrel; Nat. gas: -0.46 \$ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o July 22, 2004: Third consecutive day of record electricity use.
 - o A stage 1 alert, due to an unexpected heat wave, was declared on Mar. 31, 2004.
 - o 20 minute outage in So. Cal. on March 8, 2004 due to operator error.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001

4. Energy News Headlines from around the Nation

- o Energy legislation: smaller is better (The Spokesman Review, Nov. 17)
- o Fuel of the future? Some say coal (NYT, Nov. 20)
- o Could price of gas be lower? (LA Times, Nov. 23)

 \circ

5. River and Snow Pack Information (Updated: Nov. 18, 2004)

- Observed Oct. stream flow at The Dalles: 109% of average,
- Observed Oct precipitation above The Dalles: 123% of average,
- Observed Jan.-July runoff at The Dalles: 84 MAF, 78% of normal,
- Federal hydropower generation in Aug.: 6,246 aMW, 1995-2002 average: 6,883 aMW.
- Winter supply outlook: The region has a 1,000 average megawatts energy surplus. The likelihood of a power shortage for the winter of 2004-05 from generation system inadequacies is less than 1%.

6. Energy Conservation Achievement (Updated: Feb. 11, 2004)

• State Agencies: From Oct thru Dec 2003 electrical usage was 9% less and natural gas usage was 21.3% less compared to the same period in 2000.

7. Power Exchanged: (Updated: Nov. 23, 2004)

• Average flow of power during the last 30 days

o California (exported to) 2,841 MW o Canada (exported to) 539 MW o Net power export: 3,020 MW

Energy Legislation: Smaller is Better

Nov 17 - Spokesman Review

Lobbyists left behind when Congress failed to pass President Bush's energy bill will probably have a chance to catch up next year. Passage of the legislation was one of the administration's major unmet priorities during its first four years. With imports of \$50-per-barrel oil widening the nation's trade gap and compromising national security, there will be more pressure than ever to get the legislation enacted, its controversial provision to allow oil drilling in the Alaska Natural Wildlife Refuge included.

The energy legislation, like so many other administration bills manhandled by Congress, started with a hefty enough price tag, about \$9 billion, then became a \$23 billion pork chop condemned by almost everyone who did not have a fork. Every energy producer or technology, no matter how small or exotic, got a subsidy, credit or some other form of federal assistance. Arizona Sen. John McCain, everybody's favorite maverick, didn't call it the No-Lobbyist-Left- Behind-Act for nothing.

Fortunately, the House and Senate were never able to reconcile their two different versions of the bill, which was set aside almost a year ago. The United States may still need energy legislation, but in pieces, not an omnibus bill bloated by costly amendments.

Two provisions that made their way around the stalemate could be constructive. One renewed one-cent-per-kilowatt tax credits for new wind power turbines. That subsidy helped assure the economic viability or many of the wind farms that have sprung up in the Northwest. Wind now generates about 1 percent of the region's electricity, and developers want to add still more capacity. As the technology improves and the cost of natural gas erodes the economics of running gas turbines, wind investments will look like a wiser and wiser investment.

But natural gas is not finished yet. The second energy bill provision to survive was a federal guarantee of up to \$18 billion in loans to finance construction of a pipeline that would connect Alaska's North Slope with markets as far away as Chicago. Oil companies have been forced to pump billions of cubic feet of gas recovered from oil wells back into the ground because there has been no way to ship it south. Exxon Mobil Corp., BP PLC and ConocoPhillips and their political allies have tried for 20 years to find a financially feasible way to get that gas to market. The math just didn't work out through the 1980s and 1990s, when deregulation drove natural gas prices, if not the commodity itself, south.

As any homeowner knows, those days are gone with the Alaskan summer. Gas prices have tripled in recent years, greatly improving the economics for a pipeline. But not quite enough as far as the oil companies and Alaskans were concerned. They got the loan guarantee appended to a must-pass defense construction bill. Must because the military needed the money, and must because Republican Sen. Lisa Murkowski was in a desperate re-election fight. The bill passed. She won.

Why do companies that made \$12.2 billion in just the third quarter need a loan guarantee? Well, they also have more than \$30 billion in long-term debt between them. Another \$18 billion on top of that was a deal-breaker for pipeline construction.

The State of Alaska, on the other hand, may take a piece of the project because officials think there may be money made. They passed on the oil pipeline years ago, and lament the huge profits they left on the table. One feasibility study estimated the state could make \$236 million annually on its

pipeline investment alone, bringing total revenues to \$1 billion. Or the state could settle for royalties and taxes and let the oil companies take all the risk.

If construction goes forward, it may well be a decade before anyone in the Lower 48 heats their home with Alaskan gas. In the meantime, the Northwest will continue to rely heavily on supplies from Canada, where officials seem unconcerned their neighbor to the north will hurt the gas market.

Greg Stringham, vice president of the Canadian Association of Petroleum Producers, says many Alberta and British Columbia gas fields will have passed their peak years of production. The Alaskan gas will fill pipelines to the United States that otherwise would not be used to capacity.

"We see business growth strong enough to need all the production," Stringham says, adding that some North Slope gas will likely end up in the Northwest and California.

Which, in theory, makes all of us potential beneficiaries. And maybe the pipeline will be a money-maker, the loans will be repaid, and the taxpayers will remain on the sidelines as the oil companies profit.

There are other pieces of energy legislation worth passing. An electricity reliability bill sponsored by Sen. Maria Cantwell, D- Wash., would be especially useful. More offensive provisions, like one indemnifying ground water polluters, deserve condemnation, not passage. If the country is lucky, a more fiscally responsible second- term Bush administration will put a stop to the more expensive and foolish ideas packaged into the bill shelved last year.

Fuel of the Future? Some Say Coal

By SIMON ROMERO, NYT, November 20, 2004

GERLACH, Nev. - John and Rachel Bogard are used to living off the grid in this desert hamlet, generating their own electricity with solar panels. They have been doing so for nearly 30 years.

But now the grid is rushing toward them, in the form of an electrical source even more futuristic than solar power. It is coal.

Sure, coal sounds dirty and dated, the kind of energy source that went out of fashion with big Buicks and bell-bottom jeans. But a coal project here in northern Nevada is one of more than 100 coal-fueled plants that are vying for approval around the country - the largest increase in such projects since the 1970's.

The reason for coal's resurgence is an intensifying fear in the United States that supplies will become scarce in electricity's other main fuel source, natural gas. And coal is a lot cheaper.

Altogether, energy companies in the United States have announced plans to build more coal-fired power plants in the last 12 months than they did in the last 12 years. If all those projects get off the ground, utilities would invest more than \$100 billion.

The electricity industry's back-to-the-future approach to coal is soon expected to pit dozens of communities around the country against energy companies that are planning coal-based expansion strategies in their midst.

The Bush administration has significantly shifted policy away from three decades of federal efforts to reduce the nation's dependence on coal, which is significantly cleaner than it once was, but still dirtier than natural gas.

Wednesday November 24, 2004

Now the administration is supporting the push for a new wave of coal-fueled energy, with the Energy Department investing \$2 billion in ventures intended to make coal less polluting.

But until coal-fired plants become even cleaner, clashes over their impact on air quality are expected to multiply. Because of restrictions elsewhere, many coal-fired power plants will be put in places with pristine air quality and relatively relaxed pollution restrictions.

Gerlach's location near Nevada's border with California, an energy-hungry state where environmental standards make it nearly impossible to build coal-fired plants, is one attraction for the builder, Sempra Energy. Gerlach, which has fewer than 200 residents, is at the crossroads of rail lines that can haul coal from Montana strip mines and an electricity transmission line that can send the power southward to Los Angeles and San Diego.

Gerlach has a "combination of ideal factors," said Marty Swartz, a director for project development at Sempra. As for Gerlach itself, he said, the project would generate about \$30 million in tax revenue for Washoe County, which encompasses this tiny hamlet as well as Reno, a two-hour drive south.

Prospects of new wealth for the town have done little to calm people's nerves here.

"If it's such a great deal, then let them build the thing in California," Mr. Bogard, 56, the owner of a pottery business, said. "I'm not sure if anyone involved with this realizes what a nightmare it is to have a plant spewing coal fumes go up in their backyard. This would simply destroy our life out here "

The tensions arising from Sempra's plan - known as the Granite Fox Power project - and from similar plans for other coal-fueled plants are an inevitable outcome of energy policies pursued in the 1990's. During that period, nearly every new electricity plant was built to be run on natural gas, which is cleaner-burning and was generally thought at the time to be in ample supply in North America.

But in the last five years, natural gas prices have skyrocketed as imports from Canada slowed and domestic production failed to keep up with demand. Prices have shot up to more than \$6 for each thousand cubic feet from just \$2 in 1999.

Coal, meanwhile, has remained relatively cheap, and the United States has the world's largest reserves. As a result, while it costs more to build a coal-fired plant than it does to build one to use natural gas, the running cost of a gas plant has soared in comparison with coal. A typical coal-fired power plant spends 2 cents per kilowatt-hour to fuel its operations, compared with 5 cents per kilowatt-hour for a plant fueled by natural gas.

In the partly deregulated power-generating business, much of that electricity can be sold at prices reflecting the cost of the most expensive source. "Running a coal-fired plant in these times is a gold mine," said Robert McIlvaine, a coal industry consultant in Northfield, Ill., who does research on new power plants around the country.

So far, Mr. McIlvaine has tracked announcements to build 118 coal-fired plants, including 4 others in Nevada besides Sempra's Granite Fox project. The Granite Fox plant alone is expected to supply 1,450 megawatts of generating capacity, making it one of the nation's largest; it would generate enough electricity to meet the needs of a city the size of San Francisco.

Sempra, in San Diego, has adopted a two-pronged approach to dealing with high natural gas prices. It has pursued ambitious projects to bring natural gas from Indonesia and other nations to

Wednesday November 24, 2004

Baja California, Mexico, and Lake Charles, La., placing the company at the forefront of efforts to expand imports of natural gas.

The other Sempra prong is coal, which has attracted less attention. In the last year, Sempra, together with an investment fund connected to the Carlyle Group, spent more than \$400 million to acquire a large amount of coal-fired energy generating capacity in South Texas.

Sempra is also trying to build a 750-megawatt coal-fired plant in Idaho. But its most ambitious move into coal is here in Gerlach, where Sempra wants to invest more than \$1 billion over the next five years, creating roughly 800 local construction jobs.

Despite the expected economic lift, people in Gerlach are divided over the coal-fired plant.

Giovanni Bruno Selmi, an Italian immigrant who arrived here in 1946, said he supported the project, especially if it would provide tax revenue.

"Money talks here, like it does everywhere in the world," said Mr. Selmi, 81, the owner of Bruno's Country Club, which houses one of Gerlach's three bars along with a diner and a small hotel.

Still, like Mr. Bogard, some of the people who came to Gerlach to distance themselves from the bright lights of the city are concerned over the potential environmental impact of a coal-fired plant. And they worry that a large industrial complex would ruin the aesthetics of a quiet natural swath of northern Nevada's playa, or desert flats.

Executives at Sempra said they planned to begin holding meetings in Gerlach early next year to discuss the benefits of the plant once a preliminary series of environmental and weather tests was completed.

Mr. Swartz, the Sempra executive in charge of the project, said county commission officials appear to favor it now that they have been reassured that coal-burning methods today are far cleaner than those at plants built a generation ago. Construction could begin as early as next year if Sempra wins county approval, he said.

But it will not be without a fight. Environmentalists, working with some local residents, have begun marshaling opposition.

"No matter how clean the technology for coal-fired plants, they still contribute to pollution by dumping tons of material in the air basins and beyond," Susan Lynn, executive director of Public Resource Associates, a nonprofit organization that works on land policy issues, wrote in a recent letter to Nevada's public utilities commission.

Ms. Lynn also said that Sempra's project would block opportunities for renewable energy companies in the area. Sempra, however, insists that its project would allow wind and biothermal energy companies to piggyback access on the transmission line extending to southern California.

Sempra recognizes that it needs to move quickly if it hopes to win approval for Granite Fox. Prices for coal, particularly coal from the eastern United States, have climbed this year in part because of robust demand for fuel in China.

While coal is being promoted as a secure domestic alternative to natural gas, there will be dozens of different coal and natural gas complexes competing for banks' attention, and the first projects will have a better chance of winning financing, said Will Bailey, a director in the North America power group at Cambridge Energy Research Associates, a consulting firm.

"It wasn't too long ago that coal was thought to be too low-tech for our cutting-edge economy," Mr. Bailey said. "Now that we're waking up to the fact that coal will be with us for a long time to come, it's shaking things up."

Could Price of Gas Be Lower?

■Californians should be paying closer to \$2 a gallon, based on spot prices, some experts say. By Elizabeth Douglass, LA Times, Nov. 23

Retail gasoline prices in California dropped Monday for the fifth straight week, but experts said wholesale prices indicated that motorists should be paying even less at the pump.

The gap between wholesale and retail has been larger than normal since mid-October, when the price of gasoline being traded on the spot market in Los Angeles began to slide faster than prices at service stations in the city.

"You really have not seen it filter down to the retail level," said Tom Kloza, chief oil analyst for the Oil Price Information Service, a trade publication that conducts its own price surveys.

In California, the average price for a gallon of self-serve regular fell 4.8 cents in the last week to \$2.263, having sunk almost 14 cents since hitting a record high of \$2.402 on Oct. 18, according to the Energy Information Administration, an arm of the Energy Department. Nationwide, self-serve regular eased 2.1 cents to \$1.948 a gallon, the EIA said Monday.

Some experts said Californians should be paying closer to \$2 a gallon — even taking into account the wavering cost of crude oil and the intricacies of the state's troubled fuel market.

Gasoline is thinly traded in Los Angeles and San Francisco on unregulated spot markets, making spot prices prone to big swings. Still, spot trades are solid indicators for retail prices because they have effects on what independent suppliers pay for fuel as well as on what refiners charge their branded dealers.

In Los Angeles on Monday, traders paid about \$1.36 a gallon for gasoline that meets California's strict air quality standards, according to figures from OPIS, the pricing service. After adding 60 cents for taxes and fuel transportation, the local break-even cost of regular would be \$1.96 per gallon.

Monday's EIA survey showed average Los Angeles retail prices at \$2.284, more than 32 cents above break-even levels. Typically, retail experts said, gas stations pocket 4 cents to 10 cents of profit per gallon, with the rest going to refiners.

Comparing citywide average pump prices to OPIS figures for gasoline trades, the gap between break-even and retail prices started at near zero early in October but quickly jumped to more than 20 cents per gallon, and has ranged from 30 cents to more than 44 cents a gallon for the last three weeks.

A more normal margin would be about 10 cents, according to David Hackett, president of the Irvine-based consulting firm Stillwater Associates. But he added: "This is kind of how it works. Prices zoom up and they float down."

Joe Sparano, president of the oil industry trade group Western States Petroleum Assn., acknowledged that people may look askance at the difference between retail and wholesale prices. "But that doesn't necessarily mean that there is something going on," he said. "The retail market has been coming off, and crude prices have been dropping ... but wholesale markets tend to, and often do reflect what the traders think, and that can influence the spread that you're looking at."

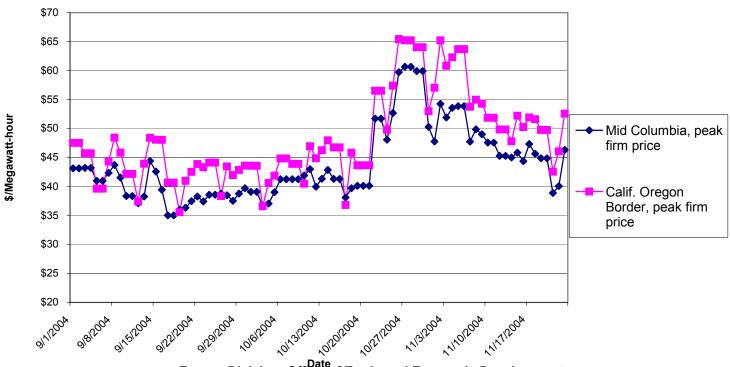
Even so, Kloza said, "I would think consumers' patience would be running thin about now ... this is a pretty big disconnect."

Bob van der Valk, bulk fuels manager for Cosby Oil Co. in Santa Fe Springs, said stubbornly high retail prices meant high profits at the refineries. "They're taking every penny they can."

He noted that gas prices could dip in Los Angeles because of a pipeline leak Monday that halted deliveries from Southern California to Las Vegas. If the pipeline isn't fixed quickly, fuel could back up, he said, pushing down the cost of gasoline in the region.

Energy prices have declined over the last four weeks, although petroleum prices inched up slightly this week. Gasoline, diesel and heating oil prices have retreated about 10 cents per gallon from their October peaks as petroleum prices have moderated, but are currently about 50 cents per gallon higher than the same time last year. Natural gas futures prices have declined about 15 percent to about \$5.2 per thousand cubic feet (Mcf). Electricity spot market prices were down about \$2 Megawatt-hour (MWh) this week, but remained high (see chart below), in the \$45 – 50 per range, as we enter the winter season.

Electricity Spot Market Prices - Northwest



Energy Division, Office of Trade and Economic Development

Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (12/1): 47,904 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$38.0–47.3 per MWh, Ave. = \$44.6

Approximate change from previous week
 "Normal" price range, before 5/00
 \$-0.1 per MWh
 \$20-\$40 per MWh

• Petroleum, West Texas Intermediate: \$49.14 per barrel (year ago: \$30.87)

• Seattle gasoline price (11/28) \$2.03 per gallon (year ago \$1.58),

Natural gas, Sumas Hub:
 Approximate change from last week.
 \$5.29 per million British Thermal Units (year ago \$4.34)
 Oil: +0.39 \$ per barrel; Nat. gas: +0.13 \$ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o July 22, 2004: Third consecutive day of record electricity use.
 - o A stage 1 alert, due to an unexpected heat wave, was declared on Mar. 31, 2004.
 - o 20 minute outage in So. Cal. on March 8, 2004 due to operator error.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001

4. Energy News Headlines from around the Nation

- o US rules out dam removal to aid Salmon (NYT, Dec. 1)
- o CalPERS urged to press automakers on emissions (LA Times, Nov. 23)
- o Williams seeks FERC approval for gas pipeline (The Daily Oklahoman, Nov. 30)
- o OECD cuts growth estimates in part due to high oil prices (WSJ, Dec. 1)

5. River and Snow Pack Information (Updated: Nov. 18, 2004)

- Observed Oct. stream flow at The Dalles: 109% of average.
- Observed Oct precipitation above The Dalles: 123% of average,
- Observed Jan.-July runoff at The Dalles: 84 MAF, 78% of normal,
- Federal hydropower generation in Aug.: 6,246 aMW, 1995-2002 average: 6,883 aMW.
- Winter supply outlook: The region has a 1,000 average megawatts energy surplus. The likelihood of a power shortage for the winter of 2004-05 from generation system inadequacies is less than 1%.

6. Energy Conservation Achievement (Updated: Feb. 11, 2004)

• State Agencies: From Oct thru Dec 2003 electrical usage was 9% less and natural gas usage was 21.3% less compared to the same period in 2000.

7. Power Exchanged: (Updated: Nov. 30, 2004)

• Average flow of power during the last 30 days

o California (exported to) 2,441 MW o Canada (exported to) 562 MW o Net power export: 3,003 MW

U.S. Rules Out Dam Removal to Aid Salmon

By FELICITY BARRINGER, NYT, December 1, 2004

The Bush administration on Tuesday ruled out the possibility of removing federal dams on the Columbia and Snake Rivers to protect 11 endangered species of salmon and steelhead, even as a last resort.

In an opinion issued by the fisheries division of the National Oceanographic and Atmospheric Administration, the government declared that the eight large dams on the lower stretch of the two rivers are an immutable part of the salmon's environment.

Endangered fish, the opinion said, can be protected by a variety of measures, including carrying fish around dams and building weirs - a new type of weir that works like a water slide - to ease young fishes' journey through dams as they swim downstream to the ocean. The total cost of the 10-year effort was projected at \$6 billion. Assuming annual expenditures of \$600 million, this represents a slight increase over existing spending for this purpose.

"It is clear that each of the dams already exists, and their existence is beyond the present discretion" of federal agencies to reverse, the opinion said.

The decision is a departure from the Clinton administration's approach to salmon protection. In 2000, it adopted a policy that allowed for dam removal, although only if all other measures had failed.

The Bush administration opinion, first released in draft form in September, provoked immediate outrage on the part of environmentalists and some tribal groups, who see it as another in a series of federal actions weakening protection for the salmon that are an integral part of the regional identity of the Northwest, and whose numbers have been sharply reduced over the decades by overfishing, dam construction, industrial pollution and suburban sprawl.

Earlier this year the fisheries division proposed including fish bred in hatcheries along with their wild cousins when calculating whether a salmon species is still endangered.

Environmentalists say the administration is retreating from the goal of recovering salmon to robust populations, settling for the status quo.

A spokesman for the fisheries division disagreed, saying the actions the agencies were taking or planned to take would be sufficient to protect the salmon. In a conference call Tuesday afternoon, officials of the fisheries service and the other agencies involved pointed out that they had drafted a letter addressed to the citizens of the Northwest with the assurance that "this approach does not represent a reduction in our commitment to salmon recovery."

In May, a senior Commerce Department official wrote to Congress that despite the decision to include hatchery fish when determining the health of fish populations, the department would probably conclude that most species currently considered endangered would remain so.

In a conference call Tuesday afternoon on the guidance to dam operators, Bob Lohn of the Northwest regional office of the fisheries service said, "The actions proposed by the federal agencies do provide major steps in making their operations fish-friendly." The dams already include fish ladders that enable many adult salmon to reach the higher parts of the rivers where they spawn.

The policy is effectively a roadmap to guide the operations of the federal agencies and power authorities that operate dams on the Columbia and Snake Rivers. It also includes an appendix with

detailed prescriptions for "reducing the risk factors" for eight of the 11 species - prescriptions which, in some cases, call for some commingling of hatchery and wild fish.

But, Mr. Lohn added, the policy "does not suggest that the dams result in no damage or that nothing should be done" to mitigate the effects that occur. Referring to the letter, he added, "We desire and we are eager to work with the region, with states and tribes, to complete the comprehensive plan" to set priorities for salmon recovery.

But one representative of the National Wildlife Federation immediately asserted that the letter to the citizens did not have the standing of the formal biological opinion and so amounted to no legal commitment. John Kober, the wildlife program manager in the group's Seattle office, said, "What we'd likely find if this plan were carried out in 10 years is exactly where we are today - fish hovering near extinction thresholds and never getting one step closer to recovery."

The National Wildlife Federation, along with the State of Oregon, successfully sued the Commerce Department, parent of the fisheries service, winning a judgment in 2003 that found that the Clinton policy, which included the possibility of dam removal among other remedies, was too vague and did not go far enough to protect the fish.

That judgment, by Judge James Redden of Federal District Court in Portland, opened the door for the Bush administration to revisit the issue and produce the opinion that was announced on Tuesday.

After the new policy was proposed in September, Judge Redden expressed skepticism at a court hearing, warning that the administration could be headed for a "train wreck."

Mr. Kober said Tuesday that "we certainly are looking seriously at continuing our litigation as a last resort," in light of the new opinion. An Oregon fish and wildlife official said officials there were still studying the opinion.

CalPERS Urged to Press Carmakers on Emissions

From Bloomberg News, LA times, Nov. 23

The California Public Employees' Retirement System should pressure automakers including **General Motors** Corp. to comply with state rules to cut carbon dioxide emissions, two directors of the pension fund said Monday.

California Controller Steve Westly and Sean Harrigan, president of CalPERS, sent a letter to other board members Monday saying that carmakers were wasting shareholder money by fighting rules that might be adopted by states that account for 25% of the U.S. car market.

This year, California approved regulations requiring makers of cars and trucks to cut emissions of the heat-trapping gas starting with 2009 models, making it the first state to regulate exhaust tied to global warming. Automakers have threatened to file lawsuits blocking the standards.

"I'm deeply concerned that the industry's plans to fight new auto emission standards in our state could harm the long-term financial interests of share owners," Harrigan said in a statement. "Auto companies and their share owners are better served if share owner dollars are used to comply with these standards rather than fight them."

CalPERS, the largest U.S. pension fund, owns shares worth \$838 million in GM, Ford Motor Co.

Wednesday December 1, 2004

and other car companies and frequently uses its investments to pressure businesses to oust managers or change policies.

CalPERS should join with other shareholders and pursue proxy campaigns if the automobile industry fights efforts to cut carbon dioxide emissions, Westly and Harrigan said in the letter. They asked CalPERS' investment committee to discuss the issue at a Dec. 13 meeting.

"We hope that auto manufacturers are preparing for the future by investing in clean technologies, rather than fighting the inevitable," the two officials said in the letter. "Worldwide efforts to address global warming are inevitable, and it is important that this board understand its effects on our investments."

New York, Massachusetts and Canada have said they might adopt California's rules, which require a 30% reduction in carbon dioxide emissions by 2016.

The Alliance of Automobile Manufacturers, representing GM, **Toyota Motor** Corp. and Ford, said the program would cost consumers \$6 billion a year for modifications to vehicles while doing little to slow rising temperatures. Fred Webber, president of the group, said shortly before the rules were adopted that the group might sue the state.

Oklahoma based Williams Cos. seeks FERC approval for gas pipeline Nov 30, 2004 - The Daily Oklahoman, By: Adam Wilmoth

A division of Tulsa-based Williams Cos. Inc. on Monday asked the Federal Energy Regulatory Commission for approval to build a \$333 million pipeline project in Washington State.

The pipeline would replace a 47-year-old line that leaked twice last year and has been the source of regulatory headaches over the past 12 months, Williams spokeswoman Beverly Chipman said.

Following the leaks, the company had to conduct numerous inspections and tests before the oldest parts of the Northwest Pipeline could return to service. Washington regulators required Williams to either replace the aging line or inspect pipe on a regular basis going forward.

"We reviewed the costs of testing with replacing the facilities," Chipman said.

"After meeting with customers about what would best meet their needs, we concluded the most cost effective option was to build a new line and take the old line out of service."

The project calls for constructing about 80 miles of 36-inch pipeline and installing 10,760 net horsepower of new compression along the existing pipeline route.

The new line will tie in with an extension project Williams built in the 1970s and 1980s and with a new section constructed last year.

If approved by federal regulators, construction is expected to begin in late 2005 or early 2006 with a service date of November 2006. Once the new system is completed, the company said, the existing 268 miles of 26-inch pipeline will be removed.

Tulsa money manager Fred Russell said Washington has been an important area for Williams in the past and continuing to service those customers in the future likely will be worth the investment.

"I'm sure they've run the numbers and discounted the expense with the increased cash flow that will undoubtedly come from a more modern system," Russell said. "This type of expense is significant, but it's well within their financial strengths."

While Williams can afford the upgrade today, Russell said such a project would have been much more difficult two years ago when the company was reeling from ill-fated ventures into telecommunications and energy trading that left it straddled with \$16 billion in debt.

Williams has sold more than \$9 billion in assets since 2002 to reduce debt and refocus the company on its natural gas business.

"Two years ago, the need to expend \$300 million or more would have been a very burdensome project that would have precipitated many more meetings and brought about a crisis," Russell said.

"That's a lot of money for any company, but it's something they can deal with now. The fact they can handle it now shows their progress over the past two years."

OECD Cuts 2005 Growth Estimates; High, Volatile Oil Prices Hit Europe, U.S., Japan; Outlook Is Better for 2006

WSJ, Dec. 1, 2004.

High and volatile oil prices may become a long-term drag on growth in the U.S., Europe and Japan, according to the Organization for Economic Cooperation and Development.

In its semiannual economic outlook, the Paris-based research group said oil prices have already taken their toll on activity in the major economies, prompting it to cut its growth forecasts for next year. Still, the OECD said global economic expansion should regain momentum by 2006.

For the 12-nation euro zone, the group reduced its 2005 forecast for economic growth to 1.9% from the 2.4% it predicted in May. The OECD said persistently high oil prices and the rising euro were weighing on European exports to North America and China.

It continues to expect the U.S. to lead the global recovery, but the group cut its growth forecast for 2005 to 3.3% from 3.7%. For Japan, it now forecasts growth of 2.1% rather than 2.8%.

The reduction in forecasts brings the OECD into line with economists at leading international banks, who have been more downbeat about the growth outlook. "Both the OECD and the International Monetary Fund were too optimistic in terms of their growth . . . forecasts; now their scenarios are having to catch up with reality," said Anais Faraj, global strategist at Japanese bank Nomura in London.

Following earlier disruptions to the economic recovery, the rise in oil prices has weakened consumer and business confidence. Although oil has fallen from its highs of \$55 a barrel earlier this fall, the OECD warned that increased global demand, especially from emerging economies like China, meant oil prices would stay well above 1990s' levels for the long term.

The organization's economic forecasts assume the price of Brent crude falls to \$44 a barrel by the end of 2006, from \$45.51 yesterday afternoon. But it noted that a supply disruption that reduced daily output by as little as two million barrels a day "could lead to substantially higher oil prices." The OECD predicted a 30% long-term rise in the price of Brent crude to \$35 a barrel in 2030 from \$27 a barrel in 2003.

Echoing the assessment of many bank economists, the OECD said the short-term impact of the oil shock was relatively modest, reducing global growth by 0.2 percentage point this year and 0.25

Wednesday December 1, 2004

percentage point next year. But if governments raise interest rates to counter oil-induced inflationary pressure, the impact on growth could be nearly double, the organization warned.

Assuming real interest rates are unchanged, the OECD said a \$15 rise in oil prices would knock more than half a percentage point off U.S. and Japanese growth next year, and nearly a third of a percentage point off euro-zone growth. So instead of growing by 1.9%, the euro-zone economy would grow by 1.6%.

The 12-nation euro zone has some protection from higher oil prices because it has reduced its dependence on petroleum and the strong euro can buy more dollar-based oil. But because the eurozone economy is already expanding more slowly than most other parts of the world, any loss of growth would be a serious blow.

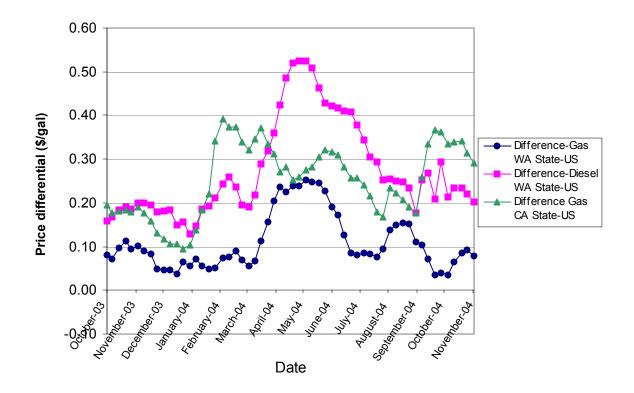
The euro zone also would be the big loser should the dollar's recent weakness be extended. "A strong euro makes the euro zone particularly vulnerable," OECD chief economist Jean-Philippe Cotis said, adding there is a small risk a stronger euro could push the currency area into recession.

Most European countries need to stimulate domestic demand, Mr. Cotis said. "Some have been trying, but the results aren't yet in the pipeline. But the OECD's report also reflected rays of optimism. "Provided oil prices do not rise further, the global expansion should regain momentum in the course of 2005, following a period of milder growth," it said.

The OECD noted that high oil prices haven't yet pushed core inflation rates higher. It added that monetary policy remains "very accommodative," and leading central banks will have to raise interest rates over the next two years, although with varying degrees of urgency.

Gasoline and Diesel prices remain higher on the west coast, but the price differential has fallen significantly since the summer.

Fuel Price Differentials WA & CA States vs. US Average



Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (12/7): 53,553 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$43-60 per MWh, Ave. = \$53.5

Approximate change from previous week
 "Normal" price range, before 5/00
 \$ +7.9 per MWh
 \$20-\$40 per MWh

Petroleum, West Texas Intermediate: \$41.47 per barrel (year ago: \$30.87)
Seattle gasoline price (12/06) \$2.01 per gallon (year ago \$1.58),

Natural gas, Sumas Hub:
 Approximate change from last week.
 \$6.44 per million British Thermal Units (year ago \$4.34)
 Oil: -7.67 \$ per barrel; Nat. gas: +1.15 \$ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o July 22, 2004: Third consecutive day of record electricity use.
 - o A stage 1 alert, due to an unexpected heat wave, was declared on Mar. 31, 2004.
 - o 20 minute outage in So. Cal. on March 8, 2004 due to operator error.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001

4. Energy News Headlines from around the Nation

- o Snohomish County: Utility projects no rate increase in its 2005 budget (Seattle Times, Dec. 1)
- o Tailpipe emission limits targeted (Seattle PI, Dec. 3)
- o Robust grid is needed to propel wind power (Rocky Mountain News, Dec. 3)
- OPEC Weighs Raising Its Target For Oil Prices Amid Recent Slide (WSJ, Dec. 6)
- o Topping off the biggest gas tank (New York Times, Dec. 6)

5. River and Snow Pack Information (Updated: Nov. 18, 2004)

- Observed Oct. stream flow at The Dalles: 109% of average,
- Observed Oct precipitation above The Dalles: 123% of average,
- Observed Jan.-July runoff at The Dalles: 84 MAF, 78% of normal,
- Federal hydropower generation in Aug.: 6,246 aMW, 1995-2002 average: 6,883 aMW.
- Winter supply outlook: The region has a 1,000 average megawatts energy surplus. The likelihood of a power shortage for the winter of 2004-05 from generation system inadequacies is less than 1%.

6. Energy Conservation Achievement (Updated: Feb. 11, 2004)

• State Agencies: From Oct thru Dec 2003 electrical usage was 9% less and natural gas usage was 21.3% less compared to the same period in 2000.

7. Power Exchanged: (Updated: Dec. 7, 2004)

Average flow of power during the last 30 days

o California (exported to) 2,675 MW o Canada (exported to) 310 MW o Net power export: 2,985 MW

Snohomish County: Utility projects no rate increase in its 2005 budget

Dec 1, 2004 - The Seattle Times, Christopher Schwarzen

A slight increase in the Snohomish County Public Utility District's 2005 budget will be covered by expected new connections instead of a rate increase.

PUD commissioners approved a \$582 million electric budget last week, about \$6 million above this year's budget. Though most spending categories are flat, the budget includes about \$3.5 million in additional money for system-reliability improvements, PUD spokesman Neil Neroutsos said.

Those improvements include trimming trees, replacing old power poles and repairing underground wiring. In recent years, the PUD has cut most of its capital expenditures rather than increase rates.

But too many cuts could cause infrastructure problems, Neroutsos said.

Although there was no room for a rate reduction next year, PUD officials said that if power costs stabilize, a 2006 rate decrease may be possible. The PUD purchases about 80 percent of its electricity from the Bonneville Power Administration, which has been working to control rising costs.

The last customer rate increase came in 2001, after the West Coast energy crisis. Two increases put the PUD's residential rates atop all public utilities in Washington. But because of a 5 percent rate decrease in 2002, it now ranks between fifth and 10th.

"After the energy crisis [of 2001], several utilities raised rates, but over the last three years, we've had a decrease while they've continued going up," said Glenn McPherson, the PUD's assistant general manager of finance. "We've seen progress in our going from the top to further down in the pack."

The PUD's continuing legal struggles over Enron have been a factor in preventing further cuts since 2002, McPherson said. Enron sued the PUD for \$122 million, alleging it had illegally ended a nine-year contract with the now-defunct company.

If the suit is settled in the PUD's favor, more rate relief may be possible, McPherson said.

The increase in next year's budget is to come from an expected 6,300 new connections, pushing the PUD's customer base above 300,000. The PUD has grown by nearly 15,000 customers the past three years.

Tailpipe emission limits targeted

Lawmaker wants state to toughen standards

By Larry Lange, Seattle PI, Friday, December 3, 2004

A major move is expected in the state Legislature next year to reduce the state's auto tailpipe emissions of gases that contribute to global warming, one that could trigger a battle with automakers.

A bill requiring cars sold in Washington to meet stricter California emission limits will be introduced by Rep. Ed Murray, D-Seattle, chairman of the state House Transportation Committee.

The effort would be a first for the state, which historically has followed the less stringent federal tailpipe emission limits.

Wednesday December 8, 2004

"We have an issue of global warming, but, more importantly locally, our own air -- what we breathe," said Murray, adding lawmakers have been told that Puget Sound-area air quality is deteriorating. "I think this is an opportunity to address both issues."

Murray and his supporters are emboldened by the initial conclusions of a Puget Sound Clean Air Agency committee that recommends enactment of the tougher standards. The committee, which includes environmental groups, trade associations and businesses such as Weyerhaeuser and Boeing, will complete its final report by the end of the month.

Some pollutants such as particulates have been reduced by other control measures, one regulator said, but some officials want to reduce the amount of carbon dioxide and other gases that contribute to global warming. Global warming occurs when gases form a blanket around the Earth, trap heat and contribute to higher temperatures, a condition scientists said has melted ice caps and reduced mountain snowpacks.

The new measures, some said, also will cut the amount of toxic substances emitted by car engines, such as benzene and formaldehyde.

Doing so, they said, also means cars will burn gasoline more efficiently, saving their owners money. Supporters say adopting the California standards would reduce emissions of the greenhouse gas carbon dioxide by 30 percent in new vehicles, reducing those emissions 17 percent for the Puget Sound fleet overall by 2016. The new standards, under Murray's bill, would be in effect for cars sold in the state starting in 2009.

Reductions in "toxic" gases such as benzene and formaldehyde aren't as clear. Leslie Stanton of the Puget Sound Clean Air Agency said they'd be cut from 2 percent to 20 percent but the estimates are still being refined.

"The easiest way to protect the climate against global warming is to be more efficient with energy use -- burn less," Stanton said.

Lisa Andrews, spokeswoman for the clean-economy advocacy group Climate Solutions, said the cost of the more advanced pollution controls will be repaid within 18 months by the fuel savings.

"It's a very big deal," said environmental lobbyist Cliff Traisman of the change, which he called "one of the environmental community's top priorities this (coming) year in the legislative session. It would bring a whole influx of new cars and new car choices into the market. Here (now) if you want to buy a Ford Escape or a Toyota Prius there's a waiting list. In California the market is filled with these vehicles."

Stanton said the legislation would be a "major step for us in terms of reducing global warming from cars." It could also provoke a major fight with automobile manufacturers, who have resisted state efforts to deal with greenhouse gases.

The industry likely will oppose Murray's measure, according to John Cabaniss, director of environment and energy for the Association of International Auto Manufacturers. The trade group is represented on the Clean Air Agency's committee but "we've made it clear in that process that we don't support any state action on greenhouse gas standards for cars, including California," Cabaniss said.

The emission reductions result from installation of turbochargers, catalytic converters, transmissions with six speeds and dual clutches, low-leak air conditioning and electric power steering. Cabaniss said such features save fuel but add to the vehicle cost, and some industry officials don't agree the fuel cost savings will pay back the additional expense.

"There's some uncertainty on what the costs and benefits are."

He said carmakers don't oppose efficiency improvements but that standards for emission-reducing engine efficiency are the province of federal regulators and "we don't believe any state has authority to set (efficiency) standards."

"For decades there has been a federal pre-emption that says states are not allowed to set standards for fuel economy (and the proposed emissions limits) are clearly based on fuel economy," Cabaniss said.

The Washington State Automobile Dealers Association has not yet taken a position on the bill, said Executive Vice President Vicki Fabre, but will take one "after we evaluate the impact of the bill on the dealers, the state and the driving public, and, of course, other (pollution) emitting industries." She said her group will consider "at the cost to consumers and how this ... legislation affects (auto) inventory."

'Robust' Grid is Needed to Propel Wind Power

Dec 03 - Rocky Mountain News

The Western states have tremendous opportunities to generate power from wind, but there's a glaring deficiency: inadequate high-voltage power lines to carry the electricity to consumers.

"There is a need to have a robust transmission grid," said Pat Wood, chairman of the Federal Energy Regulatory Commission, during a conference on wind energy in Denver on Wednesday.

Wood said lack of a regional collaboration to build and manage transmission lines is thwarting new investment in the grid. Transmission lines carry high-voltage electricity from power plants to substations where the voltage is lowered for final delivery to households.

"A robust grid will ensure good pricing for electricity and savings for consumers," Wood said, noting that newer transmission lines will help wind-power developers better compete across Western electricity markets and offer lower prices.

Wood said FERC would push for the creation of a regional transmission organization, known as an RTO, in the West.

An RTO, like an air-traffic control tower, directs the flow of electricity to different transmission lines just as controllers in the tower direct airplanes to various flight paths.

The RTO does not own the electricity or the transmission lines. It just coordinates the trade and flow of electricity so that companies can buy and sell power through one agency.

"It is frustrating that nobody trusts anybody to be a leader and develop an RTO in the West," Wood added.

Speaking at the conference, New Mexico Gov. Bill Richardson urged FERC to play a more aggressive role in promoting wind energy and resolving transmission issues.

Richardson said Congress should extend the federal production tax credit for wind by five to 10 years to make the generation cost more stable over a longer period. The wind tax credit - 1.8 cents per kilowatt-hour - has been extended through Dec. 31, 2005.

Also, Richardson suggested a national renewable energy standard whereby the U.S. would commit to generate 25 percent of its total electricity from wind, solar and other renewable sources by 2020.

"We should create incentives such as investment credits for power projects that combine wind with gasified coal . . . that will make it easier to dispatch wind power across states," Richardson said.

INFOBOX

Wind energy * The U.S. Bureau of Land Management plans to allow an estimated 3,200 megawatts of wind-energy development across 16,000 acres of federal land in 11 Western states in the next 20 years. * About 4,200 acres of federal land in Colorado will be available to generate roughly 90 megawatts, said BLM's Lee Otteni during Wednesday's conference in Denver. * Public comment on BLM's draft policy will be accepted through Dec. 10, and a final decision will be made in July or August 2005.

OPEC Weighs Raising Its Target For Oil Prices Amid Recent Slide By BHUSHAN BAHREE, THE WALL STREET JOURNAL, December 6, 2004

Even as oil prices tumble from a yearlong surge, easing pressure on the global economy, OPEC is considering a move to stem the slide: an informal attempt to keep minimum prices near \$40 a barrel, a sharp increase from the cartel's current target.

A growing number of players inside the Organization of Petroleum Exporting Countries is seeking to establish a floor price of \$30 for a basket of crude-oil varieties sold by the cartel, according to several oil officials from member nations. The higher floor would be equal to roughly \$40 a barrel for the more-prized U.S. light, sweet benchmark crude, and represent an increase of more than one-third over the current target range of \$22 to \$28 for the basket of OPEC crudes.

Such a move would mark OPEC's attempt to keep prices at recent levels, as the OPEC basket of crudes currently is within the potential new price range. It also would mark a reversal for the cartel, which pumps more than a third of the world's oil. As oil marched upward this year, OPEC members tried to talk it down. Now, "there is a feeling that prices should be between \$30 a barrel and \$40 a barrel" for the OPEC crude basket, said an oil official from a key OPEC member

country.

Less for OPEC As oil prices drop, the weakening dollar has reduced revenue for oil-producing nations even more. Price per barrel \$60 Nymex market price 50 45 40 Adjusted for the change in the U.S. dollar . 35 Note: Adjusted using the daily change in the J.P. Morgan Index of the dollar against the currencies of its major trading partners. Source: Thomson Datastream

While OPEC has considerable influence over world markets, efforts to maintain a higher floor could fall short. The cartel hasn't been able to control prices during their recent run-up and has had trouble in previous years enforcing production discipline among its members. Oil prices remain relatively high, though they trail historical highs when adjusted for inflation, and producing nations may be unable to resist selling more oil into the current market.

Discussion of an informal new target comes as OPEC ministers prepare to meet in Cairo, Egypt, Friday. The OPEC officials cautioned that even if an accord is struck, a formal decision to raise the price target was unlikely to be announced until next year. Until then, they said, OPEC might test a new price band unannounced, to see if the cartel can succeed in keeping prices within it.

Any move by OPEC to defend a new, higher minimum price could have deep consequences for the world economy, the oil industry and long-term petroleum supplies. U.S. Federal Reserve Chairman Alan Greenspan and other economists have blamed the oil-price crunch as a

prime factor in this year's slowing of global economic growth. A higher minimum price could

cause a drag on the economy because airlines, motorists and people who heat their homes would effectively be paying a "tax" to suppliers in the form of bigger energy bills. On the other hand, it could also spur skittish oil-producing nations and companies to boost investment to meet rising demand

OPEC has compelling reasons to try to lock in higher prices. This year's price surge has led to an estimated \$86 billion rise in revenue over 2003 for the cartel's 11 members. OPEC members, who get paid in dollars for their oil, now fret that the depreciation of the U.S. currency is eroding the value of their oil revenue, at a time when they are facing higher outlays for social programs and energy-infrastructure investment.

OPEC officials say the cartel might consider a cut in its oil-output quotas if prices keep plunging in order to forestall a rout. An output cut would be quicker to orchestrate than a change to the pricing system itself. OPEC president Purnomo Yusgiantoro of Indonesia has opposed a quota cut, saying prices were expected to drop, but falling prices increase pressure on other producers to act.

The talk follows a 23% drop in the price for U.S. benchmark oil since its October peak, though it remains 31% higher than at the beginning of the year. On Friday, U.S. benchmark oil settled at \$42.54 a barrel, down 71 cents. The OPEC basket is now at \$35.42. The gap between the two oil types can vary widely.

OPEC, keen to avoid accusations of price-gouging, has a history of initiating path-breaking moves informally. Its March 2000 creation of the price-range system, in which OPEC agreed to cut or raise output to keep oil between \$22 and \$28 a barrel, wasn't immediately announced to the public. That works out to about \$30 to \$38 for U.S. benchmark crude, based on the current price gap.

OPEC typically tries to keep oil trading several dollars above its minimum target, and the price-range system helped keep prices at around that level. But this year's oil-price surge has rendered OPEC's price-band system moot for months. Prices shot above the upper limit in December 2003 and have been trading well above it since, exceeding \$55 for the U.S. benchmark in October.

The most powerful player in OPEC -- Ali Naimi, oil minister of No. 1 producer Saudi Arabia and thus the cartel's de facto leader -- has yet to tip his hand on the price-target issue. Mr. Naimi has tried to run OPEC like a central bank for the global oil system, and prefers to catch markets by surprise with the cartel's decisions, for maximum impact. But he drops enigmatic clues to his intentions. Last week, he sent traders reading tea leaves when he said producers want to be assured that oil trades at \$30 to meet their budgetary requirements, without elaborating.

But other OPEC powers have publicly floated the idea of shooting for a higher floor price in recent weeks. Iran, the cartel's second-largest producer, is openly pushing to raise the price, though it noted a formal change isn't likely. "I agree we should change the price band but some of our colleagues maybe don't believe now is the right time to do so," said Bijan Namdar Zangeneh, Iran's oil minister.

Venezuelan President Hugo Chávez -- whose country is OPEC's No. 3 producer and has a tradition of instigating new OPEC initiatives -- late last month named \$30 a barrel as the "new minimum" price. On Nov. 25, he told business executives in Moscow that he had met recently with Moammar Gadhafi, leader of OPEC member Libya, and the two agreed to junk the \$22-\$28 price band.

Longer term, a higher OPEC price target could help stabilize energy markets by encouraging oil companies to invest more in finding and pumping new sources of petroleum. One cause of the oil crunch of 2004 is years of underinvestment in exploration by Western majors and OPEC countries, which in turn was a response to a long period of low prices. Now, oil demand has been growing

Wednesday December 8, 2004

faster than supply. Even amid high prices, Western oil giants have been reluctant to ramp up spending for fear prices may crash. A concerted OPEC effort to defend higher prices could allay those concerns.

"I would put a very low probability on prices going back to \$25 a barrel" for the OPEC basket, or \$32 for U.S. crude, said another senior OPEC official.

The oil crunch of 2004 stems from a number of factors -- most fundamentally, booming demand. But the rally dates from September 2003, when OPEC unveiled a surprise cut in quotas in an attempt to stave off an anticipated glut. Then, in February this year, Mr. Naimi led the cartel in cutting quotas further. Prices leapt both times.

But 2004 saw demand rise at its fastest rate in 25 years, largely due to a surge in booming China. Prices soared in May after oil traders seized on a disturbing fact: OPEC producers had only a thin margin of spare oil-pumping capacity in the event of an emergency. At several points the buffer was equal to less than 1% of a global market of roughly 83 million barrels a day. A series of threats to oil facilities -- including terrorist attacks in Saudi Arabia and pipeline sabotage in Iraq -- set off the biggest rally in a generation. With no ability to put more oil on the market, OPEC leaders tried to jawbone prices down, but failed.

The cartel members have been delighted with the oil-revenue windfall, of course, which will yield them \$311 billion this year, up by \$86 billion over 2003, estimates Washington-based consulting firm PFC Energy. But some also feared that a runaway spike in prices would backfire by derailing the economy, and thus oil demand.

Senior OPEC technocrats nonetheless met in the Saudi seaside town of Jeddah in October to discuss creating a new, higher price band, but couldn't agree on a price range to recommend to ministers, according to people familiar with the talks. At the time, oil prices were shooting over \$50 a barrel.

Now, a number of factors are changing the market outlook -- and emboldening OPEC to consider a new floor price.

Mr. Naimi last week announced that the Saudis succeeded in a crash program to bring on some 500,000 barrels of oil-pumping capacity, and are earmarking money to boost capacity by an additional 1.5 million barrels a day. Iraq is managing to pump oil at a fairly steady clip, despite a continuing insurgency. Producers in the Gulf of Mexico are finally recovering from outages following September's huge hurricanes. Commercial inventories of oil have been rising, and prices are slipping.

More important, the past year has persuaded OPEC economists that the world economy can withstand higher prices, and the recent surge in demand is no fluke -- making a rise in the target price viable.

Speaking in London last Monday, when oil in New York was trading around \$50 a barrel, Mr. Naimi told reporters the high price of oil wasn't significantly hurting world growth. Saudi officials said this week's decision to boost the kingdom's oil-output capacity stemmed from a conclusion that oil demand has shifted higher with the accelerating industrialization of China and India.

Most private economists say this year's price crunch has jolted the world economy, but not enough to cause a recession, as happened after the Arab oil embargo of 1973 and the Iranian Revolution and its aftermath in the late 1970s and early 1980s. Those crises stemmed from catastrophic blows to oil supply; the 2004 oil spike is driven by healthy demand.

"Surging petroleum demand reflects strong economic growth, which in itself is good news, not bad," said James Hamilton, a professor of economics at the University of California San Diego, who has studied oil shocks. He said the price spike could cap U.S. growth at 2.5% next year, "but I would not describe the current situation as an oil shock."

Topping Off the Biggest Gas Tank

By SIMON ROMERO, December 7, 2004

A swamp near here is one of the most secretive places in America. There are no signs, just a 500-acre complex protected at all times by 30 armed guards in combat fatigues patrolling in sport utility vehicles.

This is part of the world's largest and most expensive filling station, the United States Strategic Petroleum Reserve, where a large portion of the government's nearly 700 million barrels of oil are stored in underground salt shafts that are supposed to be stable into the 2020's.

American taxpayers have invested about \$20 billion to build and stock this reserve and three others in hidden places since it was created in 1975 in response to the Arab oil embargo that began two years earlier. And now, after 29 years, it is finally about to be filled to the brim for the first time.

Some oil economists say these reserves are having important effects on oil prices. They assume that the United States will no longer be putting upward pressure on oil prices by adding to the reserve, while that huge reservoir will reduce the country's vulnerability to any new shock and soothe the "fear premium" that elevates gas prices. Others say they will simply sleep better, knowing that America has a secure energy supply.

But whether America is no longer vulnerable is not entirely clear, any more than the direction of oil prices themselves. What is clear, from a rare visit permitted by the Energy Department, which manages the reserve, is that this little-known operation is a colossus and nerve center in the energy world.

"For a while it seemed like no one had heard of us and then, boom, we're on the radar screen," Gregory Magallanez, site operations specialist at the Strategic Petroleum Reserve, said in an interview as contractors drove around the complex in small electric-powered vehicles.

Usually the only unannounced visitors here are white egrets or the occasional seagull, Mr. Magallanez said. "The attention is a little worrisome sometimes."

After Sept. 11, President Bush decided to fill the reserve to its maximum in hopes of creating an insurance policy in the event of another oil shock.

"Say you wake up one day and there's been an Iranian-style revolution in Riyadh," said David Pursell, an expert on the reserve and a principal with Pickering Energy Partners, an energy investment company in Houston. "You simply wish you had more oil."

The question of ensuring a secure energy supply has taken on added significance in the last year, as terrorist groups have taken aim at petroleum installations in Iraq and Saudi Arabia and political turmoil has struck two other large oil exporters, Nigeria and Venezuela. China's growing appetite for oil has only added to the jitters about the global oil supply.

Even though the reserve will be filled early next year, there is no sense that it has provided the country with enough of a security cushion. Altogether, the reserve would cover only about two months of the country's imported oil needs. In fact, there is growing recognition, and some

Wednesday December 8, 2004

aggressive exhortation, that the nation's dependence on imported oil and soaring global oil demand have made energy markets increasingly vulnerable to disruptions.

"We should consider increasing the reserve even further after it's full," said Bill Richardson, a former energy secretary in the Clinton administration and now governor of New Mexico. Indeed, part of the energy bill Congress might consider next year would increase the reserve in the United States by 300 million barrels, bringing the nation's entire reserve system to a billion barrels.

"I also think we should creatively find ways of releasing oil from the reserve while working together with OPEC in an effort to bring prices down," Mr. Richardson added, in a nod to the potential impact that filling the reserves could have on oil prices. "OPEC's in a box right now and because of our continuing dependence on imported oil, so are we."

Simply the notion of a full American reserve seems to have encouraged other countries to fortify their own energy storehouses. Japan, South Korea, Taiwan and Germany already have theirs. China, which surpassed Japan in the last year as the second-largest importer of oil, and India, which is competing with China for oil supplies in some developing countries, are also moving ahead with plans to build their own strategic oil reserves. Even Russia, the largest oil producer, is considering building a reserve.

Energy experts expect the new reserves to be modeled largely on the American system, which includes three other sites in Texas and Louisiana. The site here, built on a swampy hill called Bryan Mound southeast of Houston, is the reserve's largest complex, with 232 million barrels of crude oil stored almost entirely underground in immense salt domes.

Not everyone, of course, is enthusiastic about the reserve's usefulness. The costly system has been criticized since its creation three decades ago. Energy industry executives estimate that since then the government has spent more than \$20 billion to build the system and keep it stocked. The reserve emerged as a thorny political issue this year, with Democrats calling on the Bush administration to release oil from the system in an attempt to ease rising fuel prices, much as President Bill Clinton tried to do in 2000.

Free market advocates aligned with President Bush's own party, meanwhile, have renewed calls to do away with the reserve altogether as a way of removing government involvement in the pricing of crude oil. Despite concern over high oil prices, neither proposal has gained ground while worries persist over threats to petroleum security in the Middle East, the world's main source of oil exports.

The potential enlargement of the reserve in the United States and the creation of reserves elsewhere might put additional pressure on oil prices.

But only about 100,000 barrels a day go into the United States reserves out of worldwide consumption of 82 million barrels. The United States consumes about 20 million barrels of oil a day, or about a quarter of global consumption, so at its current level of about 671 million barrels, the reserves would provide the equivalent of just two months of crude imports.

It is impossible to know exactly how a complete withdrawal of the reserve's oil would play out since that has never happened before. Altogether, technicians at the reserve estimate it can release a total of 4.5 million barrels a day, falling substantially short of current domestic consumption. The two largest withdrawals were 17 million barrels during the Gulf War in 1991 and 30 million barrels in 2000, neither of significant size or duration.

Here in Freeport, the reserve functions differently from systems in countries like Japan, where private companies are required to store oil and refined gasoline to complement the government's own inventories. In the United States, the reserve consists almost entirely of unrefined oil acquired directly from producers instead of purchases of oil on the open market.

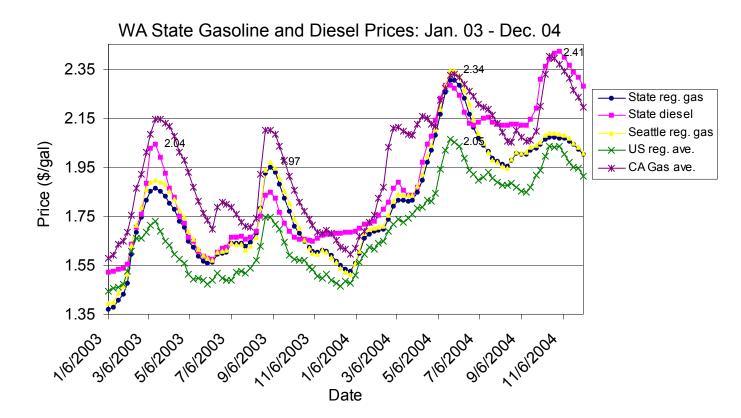
The government takes the oil in place of royalty payments that energy companies normally make to drill on public land, though some imported crude also goes to the reserve through exchanges to acquire a variety of sweet and sour blends of crude.

Security measures at the Freeport complex, which was originally created by the Dow Chemical Company to store magnesium, have been enhanced in the last three years. Visitors to the reserve are required to be American citizens, a rule waived recently when technicians from Russia and India toured the site as part of studies toward creating their own reserves. Thirty armed guards in gray combat fatigues patrol the 500-acre site around the clock.

"The costs of creating a reserve are high, but minimal in comparison to a catastrophic oil shock disruption," said Gal Luft, executive director of the Institute for the Analysis of Global Security, an organization in Washington that studies energy security issues and that is pushing for three one-billion-barrel reserves in North America, Europe and Asia to be built over the next decade.

"The problem is that new reserves aren't being created at a pace that equals the decline in spare oil production capacity around the world," Mr. Luft said. "Obviously, 700 million barrels in this country is not enough."

Increasing petroleum stocks have allowed gasoline and diesel prices to continued their decline, with state average regular gasoline prices dipping below \$2.0/gal. for the first time in three months.



Energy Division, Office of Trade and Economic Development

Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (12/16): 51,018 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C: \$49-59 per MWh, Ave. = \$52.6

Approximate change from previous week
 "Normal" price range, before 5/00
 \$ -0.9 per MWh
 \$20-\$40 per MWh

Petroleum, West Texas Intermediate: \$44.20 per barrel (year ago: \$30.87)
Seattle gasoline price (12/16) \$1.97 per gallon (year ago \$1.58),

• Natural gas, Sumas Hub: \$5.91 per million British Thermal Units (year ago \$4.34)

• Approximate change from last week. Oil: 2.73 \$ per barrel; Nat. gas: -0.53 \$ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
 - o July 22, 2004: Third consecutive day of record electricity use.
 - o A stage 1 alert, due to an unexpected heat wave, was declared on Mar. 31, 2004.
 - o 20 minute outage in So. Cal. on March 8, 2004 due to operator error.
 - o Most recent rotating blackouts: Tuesday, May 8, 2001

4. Energy News Headlines from around the Nation

- o State should adopt California's auto emissions standards (Seattle PI Dec. 8)
- o Report on energy impasse, with some improbable views (NYT Dec. 8)
- o Bush selects new energy secretary (NYT, Dec. 13)
- o Groups fueling add blitz for LNG (LA Times, Dec. 13)
- O Hybrid buses' fuel economy promises don't materialize (Seattle PI, Dec. 14)

5. River and Snow Pack Information (Updated: Dec. 17, 2004)

- Observed Nov. stream flow at The Dalles: 98.8% of average,
- Observed Nov. precipitation above The Dalles: 60% of average,
- Observed Jan.-July runoff at The Dalles: 84 MAF, 78% of normal,
- Federal hydropower generation in Nov.: 7,359 aMW, 1995-2002 average: 7,593 aMW.
- Winter supply outlook: The region has a 1,000 average megawatts energy surplus. The likelihood of a power shortage for the winter of 2004-05 from generation system inadequacies is less than 1%.

6. Energy Conservation Achievement (Updated: Feb. 11, 2004)

• State Agencies: From Oct thru Dec 2003 electrical usage was 9% less and natural gas usage was 21.3% less compared to the same period in 2000.

7. Power Exchanged: (Updated: Dec. 17, 2004)

Average flow of power during the last 30 days

o California (exported to) 2,811 MW o Canada (exported to) 274 MW o Net power export: 3,085 MW

Locke: State should adopt California's auto emission standards

Seattle PI, Dec. 8, 2004. By DAVID AMMONS

Gov. Gary Locke and legislative Democrats on Wednesday proposed that Washington adopt California's vehicle-emission standards, the toughest in the world.

Locke, a two-term Democrat who leaves office in January, also announced a freeze on state government purchase of four-wheel drive sports utility vehicles. The state motor pool will begin shifting to hybrid vehicles.

The proposal to adopt California's auto standards, effective the 2009 model year, is the centerpiece of the lame-duck governor's package of bills to combat global warming.

Other proposals:

- -Establish state energy efficiency standards for commercial appliances and products, such as commercial washing machines, refrigerators and icemakers. Federal standards already cover consumer appliances.
- -Adopt state goals for reducing greenhouse emissions.
- -Require utilities to focus on renewable and energy-efficient generation of electricity.

House Transportation Chairman Ed Murray, D-Seattle, and a number of majority Democrats in the Senate announced their support for the full package. Murray and Locke said Republicans also have expressed interest and that bipartisan votes are likely.

California estimates that the tough new standards will cut emissions in cars and light trucks by 25 percent and in larger trucks and SUVs by 18 percent.

The auto industry sued California on Tuesday. Locke said Washington will monitor the lawsuit, but believes federal law clearly allows the California standards and that other states are free to adopt them.

Seven other states have adopted California's standards: New York, New Jersey, Connecticut, Massachusetts, Maine, Vermont and Rhode Island. The eight states account for about a fourth of American car sales.

The rules require automakers to use better air conditioners, more efficient transmissions and smaller engines.

Report on Energy Impasse, With Some Improbable Views

By MATTHEW L. WALD, NYT December 8, 2004

In an attempt to break a deadlock on energy policy, a diverse group of environmentalists, academics and former government officials will publish a report on Wednesday that presents strategies for making the country cleaner, more competitive and less vulnerable to energy shocks.

The strategies, intended to be the basis for action by Congress, include policies that are generally anathema to at least some of the constituencies represented by members of the group.

It says the government should force increases in efficiency in cars and electrical equipment, stimulate global oil production, regulate greenhouse gas emissions with a trading system, rapidly expand a new method of burning coal and explore a revival of nuclear power.

The \$5 million, two-year private study, titled "Ending the Energy Stalemate," is intended to be a package-deal blueprint, akin to a Ford Foundation report 30 years ago that first suggested vehicle mileage standards and a national petroleum reserve.

"There are people in this group who would not have endorsed one part if not for corresponding parts," said William K. Reilly, a co-chairman of the study and administrator of the Environmental Protection Agency under the first President George Bush in the late 1980's and early 90's. "I'm a lifelong conservationist," Mr. Reilly said, "and 10 or 12 years ago would not have imagined myself advancing the future of coal."

The group, the National Commission on Energy Policy, was financed by the Hewlett Foundation and other private sources. John P. Holdren, a professor of environmental policy at Harvard and also a co-chairman, said that with the pressures of the presidential election over, the combination of high prices for oil and natural gas and "the way things evolved in Iraq" might make the country "more ready in principle for this sort of package."

The third co-chairman was John W. Rowe, chairman of Exelon, a big power company; members of the group included R. James Woolsey, a former director of central intelligence, and Martin B. Zimmerman, a vice president of Ford.

The group's report suggests sharp increases in fuel economy requirements, and letting automakers buy and sell mileage credits in much the same way utilities now trade the right to emit pollution. It calls for a similar cap-and-trade system for limiting greenhouse gas emissions, with a price limit on the value of a ton of emissions, to avoid stunting economic growth.

The group advocates spending \$2 billion to build one or two sample nuclear reactors using advanced technology. It also supports building electricity plants that cook coal to produce combustible gases, which are then burned in turbines like those used at natural gas plants. This approach leaves open the possibility that carbon dioxide can be captured to prevent global warming.

The study gives short shrift to several perennial ideas on energy. Hydrogen, championed by the current President Bush in the 2003 State of the Union speech, fails on at least two of the four criteria the commission said a new technology should have: being compatible with the existing distribution infrastructure, and being competitive with gasoline by 2020. The commission cited an estimate by the National Academy of Sciences that full development of hydrogen technology is 50 years away.

It was not enthusiastic about corn ethanol, because its potential to replace gasoline is limited and the reduction of carbon dioxide is modest. And it costs twice what gasoline does, the report said. Another possibility, the authors said, was an emerging technology, ethanol made from the woody part of plants.

The report also did not stress ordering electric companies to buy more power from solar and wind plants and other renewable sources. Eighteen states have renewable energy standards, specifying a quotas for such sources; Colorado voters approved one in last month's election.

Bush Selects a New Secretary of Energy

By ELISABETH BUMILLER, December 11, 2004

President Bush filled one of the last openings in his second-term cabinet on Friday by nominating Samuel W. Bodman, the deputy treasury secretary and a former executive in the chemical industry, as secretary of energy.

As the former chairman and chief executive of the Cabot Corporation, a company that imported natural gas into the United States from Trinidad, Mr. Bodman gained experience in one of the biggest problems he will face in his new job: how to bring down the cost of natural gas to American consumers and businesses.

"Sam Bodman has shown himself to be a problem solver who knows how to set goals and he knows how to reach them," Mr. Bush said in announcing the appointment in the Roosevelt Room of the White House. "He will bring to the Department of Energy a great talent for management and the precise thinking of an engineer."

Mr. Bodman, 65, a former professor of chemical engineering at the Massachusetts Institute of Technology, has also served as the president of Fidelity Investments and the deputy secretary of the Commerce Department.

"The job as energy secretary in many ways combines all aspects of my life's professional work," Mr. Bodman said in brief remarks in the Roosevelt Room.

Every facet of his career, he added, "dealt with the financial markets and the impact of energy and technology on those markets."

If confirmed by the Senate, Mr. Bodman will succeed Spencer Abraham, who resigned last month.

Energy analysts said that in selecting Mr. Bodman, Mr. Bush had made a practical decision and given the job to an academic and an experienced manager who had run both an industrial company and Fidelity Investments, the mutual fund behemoth. The president also named a person, as is customary, who had not run a major energy company.

"He's chosen someone who's quite pragmatic," said Jeffrey Zekauskas, a chemicals industry analyst for J. P. Morgan. "If he had been the head of a large multinational oil company he would have been perceived to be drawn immediately into large conflicts of interest, given that his decisions would affect the fate of companies that he owned stock in or that he had worked for. Cabot Corporation is for the most part not involved in energy anymore."

Analysts said that Mr. Bodman transformed Cabot, which is based in Boston, from a diverse collection of businesses in the 1980's into a company that focused on importing natural gas and manufacturing three products. The products were carbon black, a material used on tires; fumed silica, a chemical used in sealants; and tantalum metals, which are used in the parts that store electric charges in consumer electronics like cellphones.

"He brings a very broad experience to a job that is not only secretary of energy but also secretary of science and technology," said Daniel Yergin, the chairman of Cambridge Energy Research Associates in Massachusetts.

As energy secretary, Mr. Bodman will face many of the same issues that consumed Mr. Abraham: the future of nuclear power, the development of clean-coal technology, how to update an outmoded electricity industry and the battle over oil drilling in the Arctic National Wildlife Refuge.

One of his first challenges will be pushing energy legislation that has stalled in Congress over the past two years, in large part because of opposition to a White House proposal to drill for oil in the Arctic National Wildlife Refuge.

Despite his expertise, it is unclear to what extent Mr. Bodman will set the administration's energy agenda. The role of energy czar has largely been filled by Vice President Dick Cheney, and major energy policy has come out of the White House.

Mr. Bodman graduated from Cornell University in 1961, got his doctorate from M.I.T. in 1965, taught chemical engineering there, spent 17 years at Fidelity, then spent 15 years at Cabot. In 2001, he moved to Washington to become deputy secretary of commerce, where he focused on the operations of the National Oceanic and Atmospheric Administration and the Patent and Trademark Office.

In February Mr. Bodman moved to the Treasury Department, where he worked on reorganizing the offices that seek to stop the flow of money to terrorists.

Groups Fueling Ad Blitz for LNG

• A coalition hires a consultant with ties to Gov. Schwarzenegger to bolster public support for liquefied natural gas.

By Marc Lifsher, LA Times Dec. 13

An influential business coalition has hired Gov. Arnold Schwarzenegger's favorite political consultant to mount a \$1-million public relations blitz touting the benefits of liquefied natural gas.

The pro-LNG offensive being planned by consultant Mike Murphy has the earmarks of a campaign for public office, relying on advertising, polling, focus groups and other tools of the political trade. Murphy's new bosses, which include energy companies and some of the state's richest and most savvy special interest lobbying groups, want him to redefine the debate over LNG, a controversial form of natural gas.

"We're going to need more natural gas in the state in the coming decade to fuel our economy," said Joseph Lyons, an energy lobbyist with the California Manufacturers and Technology Assn., one of the leaders of the Californians for Clean Affordable and Safe Energy coalition. "We're not going to be able to conserve our way out of a gas crisis."

Developers are vying for financing and permits to build as many as half a dozen coastal terminals in California and northern Mexico to unload the LNG. The gas, produced in such distant countries as Australia, Indonesia and Russia, is supercooled until it turns to liquid so it can be shipped across the ocean in special tankers.

Industry and government officials contend that importing large volumes of LNG would diversify California's sources of natural gas, which is burned to generate most of the state's electricity.

Without a steady flow of LNG, the state could be whipsawed by the kind of volatile prices that boosted electricity and natural gas bills during the energy crisis of 2000 and 2001, LNG advocates say.

But LNG projects have ignited considerable opposition.

LNG critics — mainly environmentalists, alternative energy advocates and coastal residents — say the state should work to become less dependent on fossil fuels. They worry about accidents or

terrorist attacks, and those fears have generated headlines and stirred up environmental activists and homeowners along the Pacific coast.

Now, industry is getting ready to fight back, led by the California manufacturers and technology coalition and the California Chamber of Commerce.

What's needed to win the LNG war is an industry-sponsored campaign that "will provide political air cover to elected officials of both parties who might be willing to support LNG but fear fallout [from voters] in their districts," according to Murphy's winning sales pitch, which was presented to the state manufacturers group in August.

The pro-LNG coalition includes the California League of Food Processors, California Retailers Assn., California Building Industry Assn., Western States Petroleum Assn., Agricultural Council of California, Silicon Valley Manufacturing Group and the American Electronics Assn. It also has the backing of energy companies vying for a foothold in the potentially lucrative California LNG market: Sempra Energy, Royal Dutch/Shell Group, ChevronTexaco Corp., Mitsubishi Corp., BHP Billiton and Woodside Petroleum Ltd.

The trade groups and energy corporations have contributed tens of millions of dollars to the political campaigns of Schwarzenegger and lawmakers in recent years.

Industry leaders said they picked Murphy and his firm, **Navigators**, because of the thoroughness of their plan to unleash an "air and ground war" in the media, the statehouse and community forums up and down the state. The campaign's goal is to convince people that LNG is "important to the economy ... safe ... and good for the environment."

Energy lobbyist Lyons of the state manufacturers association said his group was particularly impressed with Murphy's record of helping Schwarzenegger oust then-Gov. Gray Davis in the 2003 recall election.

Navigators further burnished its reputation by running Schwarzenegger's subsequent ballot efforts to refinance the state debt with \$15 billion in bonds and to defeat initiatives by Indian tribes and race tracks to expand casino gambling.

In between Schwarzenegger's campaigns, Navigators, which opened a Sacramento office in the shadow of the state Capitol late last year, has nurtured a private-sector practice. Last summer, it managed a drive by **Calpine** Corp. and other non-utility electricity generators to kill a bill backed by **Southern California Edison** Co.

The proposal, AB 2006 by Assembly Speaker Fabian Nuñez (D-Los Angeles), would have partially re-regulated California's power market. It passed the Democratic-controlled Legislature but was vetoed in September by Schwarzenegger.

"We interviewed a lot of firms and chose the team that could do the best job," Lyons said. "We knew they could hit the ground running on this energy stuff."

Lyons, however, stressed that Murphy's close relationship with Schwarzenegger was "not a factor"

in his hiring. Todd Harris, the head of Navigators' Sacramento office, said he makes it clear to prospective clients that "if you're looking for someone to lobby the administration, you should look for someone else."

Harris and Joe Desmond, the governor's top energy advisor, said they maintain an arms-length relationship to avoid potential conflicts of interest. Nevertheless, Navigators wasn't shy about plastering Schwarzenegger's picture on all 27 pages of its LNG PowerPoint sales pitch.

The presentation started out by noting that Schwarzenegger "is generally supportive of LNG" and quoted a statement in his campaign platform promising to "explore building facilities for safely importing liquefied natural gas."

The campaign, which is still being organized, is designed to use advertising on television and in print media in addition to speakers and public events to "put cross pressure on liberal and environmental groups as well as other groups in opposition by organizing targeted local coalitions in favor of LNG," according to Navigators' pitch.

Advertising needs to "change the face of LNG for the public," Navigators' presentation said. People need to be convinced that LNG is not just about big energy companies but, rather, "local, state and national labor leaders, minority activists, environmentalists, small business owners."

Part of the \$1-million war chest also could be spent on polling and focus groups, conducting campaign-style "opposition research," holding educational symposiums and paying academics to do studies on the benefits of LNG, Navigators said.

Environmentalists, who operate with volunteers on tiny budgets, said they considered it a compliment to their organizing skills that industry felt it needed to run a million-dollar campaign against them.

"Clearly, they are responding to citizen opposition. They're trying to counter how most Californians feel about clean energy," said Rory Cox of environmental protection group Pacific Environment in San Francisco.

Clean-air activists said they weren't about to support importing LNG until they saw evidence that demand for more energy couldn't be met by greater energy efficiency and use of renewable sources like wind and solar power. They noted that the California Energy Commission was projecting growth in demand for LNG at only 1% a year over the next decade.

LNG skeptics have asked the California Public Utilities Commission to hold hearings on whether the state needs LNG.

Meanwhile, industry is trying to create phony pro-LNG public support, said Michael Shames, director of the San Diego-based Utility Consumers' Action Network. Shames thinks the Schwarzenegger administration is along for the ride, despite official denials.

"They want to provide the governor cover for what he's already privately indicated he's going to do," Shames said. "They're building a factual case out of thin air."

Hybrid buses' fuel economy promises don't materialize Older models have gotten better mpg

By JANE HADLEY SEATTLE POST-INTELLIGENCER REPORTER, Dec. 14

Expensive new hybrid diesel-electric buses that were portrayed by King County Metro as "green" heroes that would use up to 40 percent less fuel than existing buses have fallen far short of that promise.

In fact, at times, the New Flyer hybrid articulated buses have gotten worse mileage than the often-maligned 1989 dual-mode Breda buses they are replacing. Yet the hybrid buses cost \$200,000 more each than a conventional articulated diesel bus.

The disappointing results are a far cry from the rosy predictions made by officials.

In May of this year, when Metro held a public event to herald the arrival of the first of the new hybrid buses, County Executive Ron Sims said they would save 750,000 gallons of fuel a year over the Bredas.

Metro was the first agency in the country to buy a 60-foot articulated bus with a hybrid diesel-electric technology. It ordered 235 of them, 213 for itself for \$152 million and 22 for Sound Transit. Metro now has the largest fleet of hybrid buses in the world.

Hybrid diesel-electric buses use a battery-powered electric engine to assist a diesel engine. The batteries, carried on top of the bus, are charged both by the diesel engine and by capturing energy from braking action. The electric engine is especially valuable during acceleration from 0 to 12 mph, when a diesel engine would otherwise be gulping fuel, said Michael Voris Metro's procurement supervisor.

Of Metro's active fleet of nearly 1,400 buses, 1,005 are conventional diesel buses, 210 are hybrid diesel-electric, 144 are trolley buses and 28 are Bredas.

Despite the significantly higher cost and the underwhelming fuel efficiency of its hybrid buses, Metro had little choice but to get them, said Jim Boon, Metro's vehicle maintenance manager. That's because they are the only feasible bus Metro can use when it begins sharing the downtown bus tunnel with Sound Transit's light rail line in 2009.

Besides, the hybrids have their good points, Boon said. The hybrid fleet as a whole is saving \$3 million a year in maintenance costs over the Bredas. And they're quieter than regular diesel buses and faster than the Bredas on hills and the highway.

They also have very low emissions -- as do all the new buses Metro is buying these days, hybrid or not

But the expected fuel efficiency has not been there. One apparent culprit is stricter federal emissions standards. Another could be that the hybrids are used on routes -- suburban express routes with more highway mileage -- where their advantages don't shine.

In July, Yaz Yambe, a Metro schedule planner, asked Dennis Pingeon, Metro's vehicle maintenance supervisor, whether the new hybrids could be assigned to 400-mile routes. Pingeon said he initially assumed it would be no problem, but when he checked, he found otherwise.

"Yaz, it does not appear we have very good news for you on hybrid miles per gallons," Pingeon e-mailed Yambe.

The hybrids were not getting much better than 3.6 miles per gallon, yet they needed to average better than 4 mpg to be put on 400-mile routes. Pingeon suggested the hybrids not be put on any routes of over 300 miles for September.

"This is an unanticipated development," Pingeon wrote. "We had expected the mileage figures to be much better -- these figures are below our current Breda and conventional diesel New Flyer."

Boon said that today, the hybrids sometimes get better mileage than the conventional diesels and the Bredas. But it's difficult to compare different models, he said.

"It's comparing apples and oranges and pears."

And mileage performance varies from bus to bus, from route to route, and season to season, he said.

When he checked recently, Boon was told that Bredas are running at about 3.8 miles per gallon, while the conventional diesel older New Flyer articulated buses are running about four miles per gallon. The hybrids were getting 3.75 miles per gallon in September, but that has improved as the engines are getting broken in, Boon said. He expects further improvements with software tweaks.

"I've got hybrids that are getting four," he said recently. And Boon said he was surprised when he was told that Bredas were getting 3.8, because they've more typically been below 3.5.

Overall, the hybrids are getting about equivalent mileage to the older buses, Boon agreed.

That's not what was expected of the bus. In an October 2002 e-mail, Boon said, "The vendor indicates that hybrid buses can achieve up to 60 percent in fuel savings, but I am only projecting 20 percent to 30 percent given our hills and traffic congestion."

A year later, as Metro ordered the buses, the agency said they could reduce fuel consumption by 20 percent to 40 percent.

TriMet, Portland's regional transit agency, has only two hybrid buses, both the more common 40-foot hybrids.

Spokeswoman Mary Fetsch said the agency has been testing them since 2002.

"We like them," she said. "The question is about the price and when they get into full production, will the price come down."

"What we see with the fuel economy is there is improvement, but it may not be as much as we like," Fetsch said. But the bus has exceeded expectations for emissions reductions.

TIAX, a Cambridge, Mass., consultant, said a year ago that many transit agencies appeared to be delaying purchases of hybrid buses to see whether they would become "less expensive and more reliable."

Metro may have been a victim of bad timing.

The agency began road testing its first hybrid bus -- Coach 2599 -- in October 2002. The bus was put through grueling paces. It was run 20 hours a day, seven days a week loaded with barrels of water weighing 130 percent of normal capacity, to try to accumulate a year's worth of wear and tear in a short time.

Metro technicians examined its transmission, its repair record, its use of oil and its fuel efficiency, among other things.

The early tests were very encouraging. In December, Boon reported to his bosses that the buses were at 15,000 miles and had experienced hardly any mechanical problems. The hybrid was achieving about 32 percent better fuel economy than the Breda -- 4.46 miles per gallon compared with the Breda's 3.37 miles per gallon, he reported.

In January 2003, Todd Gibbs, manager of the hybrids project, said on a posting on Metro's Web site that the hybrid bus was achieving 40 percent better fuel economy than the Breda, even though it was overloaded with the water barrels. "We expect the numbers to go even higher," he said.

As the tests continued, Metro staff members called the results "impressive" and "remarkable."

But in July 2003, almost at the end of its testing period for the hybrid buses, Metro suddenly announced that it needed to switch engines.

The federal government had imposed stricter exhaust emissions standards, and the Cummins engine was not federally certified. Metro sent the bus to the Winnipeg, Manitoba, manufacturer to have a certified Caterpillar engine installed in its place.

The fuel economy results were never the same after the switch to the Caterpillar engine. Boon said it wasn't just a switch in the engine but also a switch in the emissions control system.

Caterpillar spokesman Jim Dugan said it isn't fair to compare today's buses with 1989 buses like the Bredas, which were much dirtier.

"Emissions coming out of our engines today are dramatically better than for a bus of 1989," he said. "The tradeoff is your fuel economy is not as good."

Dugan said Caterpillar "optimized" the Metro hybrid engines for lower emissions rather than for better fuel economy.

"As the EPA tightens emission control requirements on truck and bus engines, fuel economy suffers," Boon said. "The trucking industry is just going crazy over this right now."

A week before the media event to announce the arrival of the hybrids in May of this year, Metro's spokeswoman, Linda Thielke, exchanged e-mail with Voris. She wanted to break the supposed 750,000-gallon savings down into a per-bus savings.

Voris replied: "We have no revenue service experience with a Caterpillar-powered hybrid (articulated bus), so I am reluctant to make fuel economy claims."

But a week later, a Metro statement said the hybrid fleet overall would save 750,000 gallons of fuel annually.

Despite that public claim of fuel savings, Boon said that when Metro prepared its budget for 2004, it projected no fuel savings.

The hybrid has allowed Metro to eliminate 14 technicians from its staff, but Boon agreed that comparing the hybrid bus' maintenance savings to the Bredas is setting the bar rather low.

The Italian-made Bredas are notorious for the expense of their repair. Metro initially ordered spare parts from the manufacturer until Metro technicians could become more familiar with the buses and learn how to substitute lower-cost American parts. That resulted in \$258 oil filters that could be bought locally for \$4 and radiators costing Metro \$6,292 that could be bought in Seattle for \$742.

In more recent years, Metro has complained that the Bredas are difficult to repair because their original European-made parts have become more difficult to locate and often entail a long wait. At other times, a local manufacturer custom-makes parts for the buses.

"They're a very unreliable bus," Boon said, "It's a bad marriage of many technologies."

The dual-mode Bredas carried both diesel and electric trolley-powered engines and were bought in 1989 to deal with Seattle's 1.3 mile-long downtown tunnel. Their rarity made them expensive.

The hybrids share some of that problem. Only one company, New Flyer, bid on the buses. But the only other alternative was even more unappealing, Boon said.

Boston recently bought a dual-mode trolley-diesel made in Germany for its tunnel. It cost \$1.6 million per bus, compared with \$645,000 per bus for Metro's hybrid, Boon said.

"We didn't buy this (hybrid) bus because of fuel economy," Boon said. It has other desirable attributes, such as being cleaner, quieter, and saving on oil consumption and operating costs, but the tunnel forced the choice of the hybrids.

Regular diesels can't be used in the tunnel because they are too noisy, Boon saids, and older diesels put out too many toxic, smelly fumes. A trolley would be difficult if not impossible in the tunnel now, because Sound Transit needs to use overhead power for light rail.

Ironically, when the new hybrids are booted out of the tunnel next September to make way for light rail construction, their fuel economy may well improve. They can then be put on the kinds of routes -- city routes with lots of stop-and-go -- where they might well show a fuel consumption advantage over other buses.

The buses will be removed from the tunnel for about two years for tunnel alterations. When the tunnel is reopened, the hybrids will share it with light rail until the time when the trains are running so frequently they will replace buses in the tunnel.

At the end of October, a statement appeared on Metro's Web site. The headline: "Hybrid performance exceeding expectations."

Prominently mentioned were the reliability, the lower operating costs, the noise reduction. Missing from the statement? Emissions and fuel economy.